CITY OF MANCHESTER.

REPORT

ON THE

Health of the City of Manchester

FOR

1945,

BY

C. METCALFE BROWN,
M.D., D.P.H., BARRISTER-AT-LAW,
Medical Officer of Health.

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PUBLIC HEALTH DEPARTMENT,
TOWN HALL, MANCHESTER, 2,
29th July, 1946.

My Lord Mayor, Aldermen, and Members of the Council,—

I have pleasure in presenting the report on the health of the City for the year 1945.

The population of the City, as estimated by the Registrar General, is 623,480, an increase of 8,720 on the figure for 1944.

During the year a census of the City was conducted by the Housing Survey Section of the Department for billeting purposes, and this revealed a total population of 626,569, showing an increase of 3,089 on the Registrar General's estimate. The populations of the various Wards have been extracted from the survey and adjusted proportionately to the Registrar General's total estimated population of the City. These adjusted populations have been used to calculate the various rates for the respective Wards.

During the year 14,856 persons were married in the City, compared with 11,064 in 1944. This number gives a marriage rate of 23·83 per 1,000 of the population, an increase of 5·84 on 1944. In 1931 the rate was 16·05 and increased to 21·95 in 1939, whilst in 1940 the rate reached the height of 28·91. During the years 1941 to 1944 the rate fell from 23·80 to 17·99.

The number of live births registered for the City during the year was 11,362, of which 5,825 were males and 5,537 females, representing a live birth rate of 18·22 per 1,000 of the population. This is 1·63 lower than the rate for 1944. Of the above total live births 5,701, or 50·18 per cent., were born in hospitals in the City.

In 1945, the number of illegitimate births was 1,187, which is 10·45 per cent. of the total live births and is the highest percentage ever recorded for the City. This is an increase on the previous year of 2·54. The percentage for 1938 was 5·05, which is less than half the 1945 figure.

The number of stillbirths registered during the year was 372 compared with 367 for 1944. The stillbirth rate (per 1,000 live and stillbirths) for 1945 was 31·70 and this is 2·51 higher than that for 1944.

During the year, 8,985 deaths were recorded, of which 4,625 were males and 4,360 females. This gives a death rate of 14·41 per 1,000 of the population and is 0·21 higher than the rate for the preceding year.

There were 634 infant deaths in the City during 1945. This gives an Infant Mortality rate of 55·80 per 1,000 live births, and is 2·21 higher than that for 1944, which was 53·59. The rate for England and Wales was 46. It is interesting to refer back to the previous war period and to note that the Infant Mortality rate for Manchester was 128·24 in 1915 and dropped to 97·95 in 1920, whilst in 1895 the infant death rate was 202·43. The number of illegitimate deaths under 1 year of age was 77 and gives a rate of 64·87 per 1,000 illegitimately born. The rate for 1944 was 79·79.

The Registrar General's figures for neo-natal deaths are not available, but they are compiled locally and show that 311 deaths of infants under one month were recorded during 1945, giving a neo-natal death rate of 27·37 per 1,000 live births. The main causes of death in 1945 were—premature births, 38 per cent., and congenital malformation, 16 per cent.

The Maternal Mortality rate for the year is the lowest ever recorded for the City, being 1·02 per 1,000 live and stillbirths, which is 0·81 lower than the rate for 1944, and is also 0·77 lower than that for the whole country, which is 1·79. The rate for the City is made up of 0·25 for puerperal and post-abortive sepsis and 0·77 for other puerperal causes. The average rate for the City for the past five years is—puerperal and post-abortive sepsis 0·83 and other puerperal causes 1·42, giving an average maternal rate of 2·25.

There was a slight increase in the number of deaths from tuberculosis. These numbered 577 from all causes as against 559 for the previous year. The rate for all forms was 0·93, that for pulmonary tuberculosis being 0·80, and non-pulmonary 0·13. The average annual rates for the past five years were 1·13 for all forms, 0·98 for pulmonary and 0·15 for non-pulmonary. The rate for England and Wales for 1945 was 0·62, and represents pulmonary 0·52 and non-pulmonary 0·10.

Deaths from cancer numbered 1,297, giving a rate of 2·08 per 1,000 of the population. This is a decrease of 0·01 compared with the rate for 1944. The average annual death rate for the past five years is 2·08 and the rate for England and Wales for 1945 was 1·95.

No case of smallpox was notified in 1945.

There was a decrease in the incidence of scarlet fever, 1,140 cases having been notified compared with 1,539 in 1944. No deaths occurred from this disease.

There were 302 cases of diphtheria during the year, of which 14 died, giving a case fatality of 4·63 per cent. The average annual case fatality for the past five years is 4·38 per cent. No deaths occurred in children who had been immunised.

The number of children under 15 years of age who completed a full course of diphtheria immunisation during the year was 10,010 and 541 received their first injection. A mobile unit visited the areas of the City in which the percentage of immunised children under 5 years of age was low, and areas situated at a distance from the Child Welfare Centres and Day Nurseries. This unit was responsible for the complete immunisation of 2,003 children who would probably not have received treatment otherwise. At the present time, 69 per cent. of the children under 15 years of age have been immunised, the percentage in age groups being 54 in 0 to 5, and 78 in 5 to 15 years.

In 1945, 5,596 notifications of measles were received, which is a decrease on the corresponding figure of 6,736 in 1944. The 1945 case rates for the City and England and Wales were 8·98 and 11·67 respectively. Eight deaths occurred against nine in the previous year.

The number of notifications of whooping cough was 1,835 as compared with 2,003 in 1944. The case rate for the City was 2·94 and for England and Wales 1·64. There were 25 deaths due to this disease in 1945 against 26 in 1944.

Nine cases of typhoid fever occurred during the year, seven of which were amongst members of a single family. This is an increase of five cases on the previous year, but was a substantial decrease on the average annual number for the past five years, which was 35. One case died from this disease.

Forty-four cases of cerebro-spinal fever were notified and 11 deaths reported during the year, whilst in 1944 there were 28 cases and 8 deaths. The average annual number of cases for the past five years was 169.

The number of notifications of dysentery received was 413, as compared with 274 cases for last year. Four deaths occurred. Of the 413 cases, 226 proved to be associated with the presence of bacilli of the Sonne type, 147 with other specific organisms, and the remainder were diagnosed on clinical grounds alone.

In general, the health of the City has been well maintained during the year, but further progress is vital and must be energetically pursued.

The state of housing in the City, as indicated in previous reports, continued to be a matter of grave concern. There can be no hope of a really satisfactory standard of health until this problem has been solved and the efforts of the City Council in this direction are to be commended and supported.

The other major factor in relation to the future health of the community is that of nutrition. Undernourishment and malnutrition caused by lack of proper and adequate food can do more damage to the public health than can ever be overtaken by the most efficient medical service. It behoves us, therefore, as an essential public health measure, to pursue as far as possible, a food policy which will ensure on the one hand that adequate supplies of first-class foodstuffs are available and on the other hand that the excellent system of public education in the choice and cooking of foodstuffs inaugurated by the Ministry of Food in recent years be continued and extended both by local and national endeavour.

I again wish to express my grateful thanks to the Chairman and members of the Public Health Committee and to the officers of the Public Health and other Departments who have done so much during the year, as in previous years, in our common endeavour to be of service to the City.

I have the honour to be,

My Lord Mayor, Ladies, and Gentlemen,

Your obedient servant,

CHARLES METCALFE BROWN,
Medical Officer of Health.

PUBLIC HEALTH COMMITTEE

1945—46.

Chairman—Councillor T. M. Larrad, J.P.

Deputy Chairman—Councillor J. McGrath.

The Lord Mayor—Councillor Hugh Lee, J.P.

Alderman R. G. Edwards, M.A., J.P.
,, F. Farrington
,, Mary A. Gibbons
,, Alfred James, J.P.
,, Mary L. Kingsmill Jones, O.B.E., M.A., J.P.
Councillor Hannah Baldwin, J.P.
,, Nellie Beer, J.P.
,, James Bowes
,, J. E. Burgess
,, W. Chadwick, M.B., CH.B.
,, Elizabeth Cruse

Councillor Annie Eyres, J.P.
,, Eveline Hill, J.P.
,, J. H. Kearns
,, Mary Knight
,, A. Littlemore
,, W. Onions, J.P.
,, W. Somerville, J.P.
,, R. E. Thomas
,, F. E. Tylecote, M.D., F.R.C.P., J.P.
,, Mabel S. Whittaker, J.P.

PUBLIC HEALTH OFFICERS.

(A) Medical.

Medical Officer of Health	C. Metcalfe Brown, M.D., D.P.H.
Deputy Medical Officer of Health	W. St. Clair McClure, M.R.C.S., L.R.C.P., D.P.H.
Senior Tuberculosis Officer	D. P. Sutherland, M.B., B.S.
Assistant Medical Officer of Health—(Maternity and Child Welfare)	Margaret H. Mackillop, M.B., CH.B.
Senior Assistant Medical Officer of Health—*(Housing Survey)	A. M. M. Grierson, M.D., D.P.H., F.R.S.(ED.)
†Assistant Medical Officer of Health—(General)	James Fairley Swan, M.B., CH.B., D.P.H.
Assistant Medical Officer of Health—(Temporary)	Andrew V. Magee, M.B. CH.B.

Assistant Tuberculosis Officers	5	
Medical Officers, Welfare Centres (whole time)	10	
District Medical Officers under Poor Law Acts	31	Chiefly combined appointments.
Public vaccinators	26	

(B) Others.

Lay Administrative Officer—George Ogden, F.C.C.S.

Public Analyst—Harri Heap, M.SC., F.I.C.

,, ,, (Assistant)—Alfred N. Leather, B.SC., F.I.C.

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* Seconded to Civil Defence during wartime.

† H.M. Forces.

Sanitary Inspectors.

Chief—Isaac Priestley, F.R.SAN.I., F.S.I.A.	1
Divisional	2
Senior Housing	1
Housing	5
Special to the Medical Officer of Health	2
Drainage	2
Food and Drugs	3
Smoke	4
Rat Officers	2
Canal Boats	1
Milk Control	3*
House Drainage	2
District	26†
Poisons and Pharmacy Act and Rag flock	1
Houses-let-in-lodgings	3
Factories, etc. (Women)	1
Shops Act	2
Total	61

Maternity and Child Welfare.

Superintendent of Health Visitors	1
Deputy Superintendent of Health Visitors	1
Assistant Superintendent of Health Visitors (one of whom is part-time tutor to H. V. Training Course)	3
Supervisor of Midwives	1
Assistant Supervisors of Midwives	2
Municipal Midwives	61
Maternity Nurses	6
Ophthalmic Nurses	3
Health Visitors	91
Special Nurse for premature babies	1
Physiotherapists	10
Total	180

Tuberculosis.

Sanitary Inspectors	2
Nurses	14

Vaccination Officers	4

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* 1 Seconded to Ministry of Food.

† 1 Serving with H.M. Forces.

GENERAL STATISTICS

The following are general statistics for the year 1945 :—

Area of the City in acres			27,255
Census population for year 1931	Males	360,976	766,378
	Females	405,402	
Estimated population at the middle of year 1945 (Registrar General)	Males	293,667	623,480
	Females	329,813	
No. of persons per acre			23
Persons married per 1,000 of population			23·83
Live Births	Males	5,825	11,362
	Females	5,537	
Live-birth rate per 1,000 of population			18·22
Still-births	Males	197	372
	Females	175	
Still-births rate per 1,000 total births			31·70
Deaths	Males	4,625	8,985
	Females	4,360	
Recorded annual death-rate per 1,000 of population	Males	15·75	14·41
	Females	13·22	
Deaths under 1 year of age per 1,000 live births			55·80
Maternal mortality per 1,000 live and still births			1·02
Excess of registered births over deaths			2,377
Percentage of mortality occurring in public institutions			46·47

No. of occupied Structurally Separate Dwellings at the Census in April, 1931		177,430
No. of persons per occupied Structurally Separate Dwelling (Census 1931)		4·32
No. of persons per house 1945 (Based on 198,211 houses connected with the water supply within the City)		3·15
No. of new houses erected during 1945 :—		
By Local Authority including 57 Temporary Bungalows	165	
By other bodies or persons	6	
		171

METEOROLOGY, 1945.

Means of the Monthly Readings from Whitworth Observatory.

	Wet Bulb	Dry Bulb	Mean Maximum Temperature	Mean Minimum Temperature	Mean Temperature	Total Rainfall (inches)	Total No. of Wet Days	Total Hours of Sunshine	No. of Days on which Fog was noted at 09.00 G.M.T.
January	31·8	32·7	37·7	28·9	33·3	2·829	18	18·6	15
February	42·7	44·3	50·3	40·1	45·2	3·280	19	42·3	1
March	43·7	46·1	53·4	40·7	47·1	0·925	8	94·2	4
April	46·3	49·8	59·0	43·3	51·1	2·158	13	155·4	2
May	50·5	53·8	61·3	46·2	53·7	3·818	20	135·8	1
June	54·4	58·7	65·5	52·0	58·7	4·385	19	154·8	—
*July	—	62·3	69·4	56·6	63·0	1·284	15	142·3	—
August	57·0	61·0	70·0	54·0	62·0	2·506	11	182·3	2
September	54·1	57·1	64·7	51·7	58·2	3·758	15	95·1	3
October	51·1	52·7	59·6	48·6	54·1	6·069	14	66·6	9
November	44·5	46·3	50·8	42·6	46·7	0·520	11	31·2	4
December	39·8	41·2	46·3	37·7	42·0	2·242	23	18·0	7
YEAR ..	—	50·5	57·3	45·2	51·2	33·774	186	1136·6	48

The Meteorological Station situated at the Corporation Cleansing Yard, 299, Oldham Road, which has been in operation since 1892, was dismantled in June, 1938. This was necessary on account of further accommodation being required for building purposes of the Cleansing Committee. After communication with the Air Ministry they considered that the records taken at the Meteorological Station connected with the Manchester University in Whitworth Park were sufficient for their purpose.

* Thermometer broken in July—no readings recorded.

Birth Rate, Death Rate, and Analysis of Mortality, 1945.

	BIRTH RATE PER 1,000 TOTAL POPULATION		ANNUAL DEATH RATE PER 1,000 POPULATION								RATE PER 1,000 LIVE BIRTHS	
	Live Births	Still Births	All Causes	Typhoid and Paratyphoid Fever	Smallpox	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Diarrhoea and Enteritis (under two years)	Total Deaths (under one year)
England and Wales	16·1	0·46	11·4	0·00	—	0·02	0·00	0·02	0·02	0·08	5·6	46
126 County Boroughs and Great Towns, including London..	19·1	0·58	13·5	0·00	—	0·02	0·00	0·02	0·02	0·07	7·8	54
148 Smaller Towns, estimated Resident Population 25,000 to 50,000 at Census	19·2	0·53	12·3	0·00	—	0·02	0·00	0·01	0·02	0·07	4·5	43
London Administrative County	15·7	0·40	13·8	0·00	—	0·01	0·00	0·02	0·01	0·07	7·6	53
Manchester	18·2	0·60	14·4	0·00	—	0·01	—	0·04	0·02	0·07	7·3	56

A dash (—) signifies that there were no deaths.

CAUSES OF DEATH, 1945.

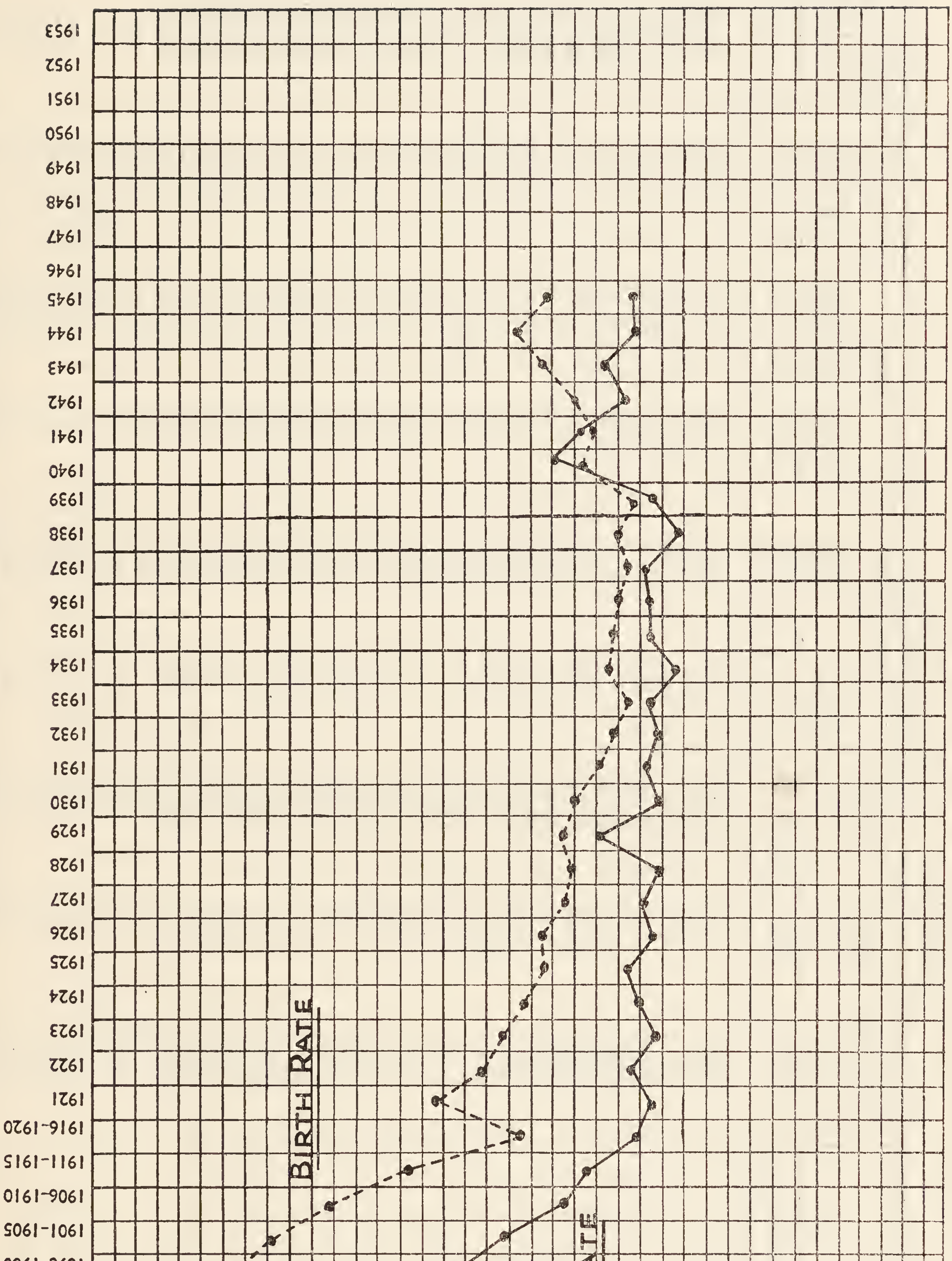
Registrar General's Return.

Causes of Death	Male	Female	Ages at Death						
			At All Ages	Under 1 Year	1 Year and Under 5 Years	5 Years and Under 15 Years	15 Years and Under 45 Years	45 Years and Under 65 Years	65 Years and Over
Typhoid and Paratyphoid Fevers..	—	1	1	—	—	—	—	1	—
Cerebro-Spinal Fever	8	3	11	5	3	1	1	—	1
Scarlet Fever	—	—	—	—	—	—	—	—	—
Whooping Cough	9	16	25	12	12	1	—	—	—
Diphtheria..	6	8	14	—	2	11	1	—	—
Tuberculosis of Respiratory System	293	203	496	3	2	7	257	177	50
Other forms of Tuberculosis	48	33	81	4	22	14	28	8	5
Syphilitic Diseases	25	13	38	6	—	—	6	16	10
Influenza	23	21	44	2	—	—	7	13	22
Measles	5	3	8	3	5	—	—	—	—
Acute Poliomyelitis and Polioencephalitis	—	—	--	—	—	—	—	—	—
Acute Infectious Encephalitis ..	6	12	18	—	—	1	8	7	2
Cancer of Buccal Cavity and Oesophagus (M.), Uterus (F.) ..	61	74	135	—	—	—	7	56	72
Cancer of Stomach and Duodenum	141	101	242	—	—	—	12	117	113
Cancer of Breast	—	116	116	—	—	—	14	55	47
Cancer of All other Sites..	468	336	804	—	1	4	51	338	410
Diabetes	15	29	44	—	—	1	3	15	25
Intra-Cranial Vascular Lesions ..	353	521	874	3	—	—	17	244	610
Heart Disease	874	950	1824	—	1	7	118	502	1196
Other Diseases of Circulatory System	164	143	307	—	—	—	3	77	227
Bronchitis	598	386	984	29	4	—	42	367	542
Pneumonia	210	155	365	97	12	—	33	102	121
Other Respiratory Diseases	60	41	101	5	—	2	15	45	34
Ulcer of Stomach and Duodenum..	56	17	73	1	—	—	9	38	25
Diarrhœa (under 2 years)	50	35	85	83	2	—	—	—	—
Appendicitis	16	11	27	—	2	3	7	9	6
Other Digestive Diseases	83	108	191	5	7	4	29	65	81
Nephritis	102	112	214	—	1	3	30	77	103
Puerperal and Post-Abortive Sepsis	—	3	3	—	—	—	3	—	—
Other Maternal Causes	—	9	9	—	—	—	8	1	—
Premature Birth	64	65	129	129	—	—	—	—	—
Congenital Malformations, Birth Injuries, and Infantile Diseases	124	79	203	189	4	2	5	2	1
Suicide	47	27	74	—	—	1	15	41	17
Road Traffic Accidents	52	28	80	—	11	15	14	17	23
Other Violent Causes	82	71	153	16	8	18	19	40	52
All other Causes	582	630	1212	42	12	20	95	161	882
Totals.. ..	4625	4360	8985	634	111	115	857	2591	4677

A table showing the mortality rates due to various causes, etc., from 1911 onwards appears at the end of the report.

CITY OF MANCHESTER

BIRTH & DEATH RATES PER 1000 OF THE POPULATION



Manchester, 1945—Population, Area Density, Births and Deaths, with Birth, Death, and Infant Death Rates.

(*Manchester Figures, 52 Weeks.*)

WARDS	Estimated populations	Area in acres	Persons per acre	Births (Live)		Deaths		Natural rate of Increase	Deaths under 1 year per 1,000 births
				Total	Rate per 1,000	Total	Rate per 1,000		
CITY OF MANCHESTER..	623480	27255	22·87	11362	18·22	8920	14·31	+ 3·91	55·27
All Saints'	11670	300	38·90	293	25·11	229	19·62	+ 5·49	68·26
Ardwick	16276	426	38·21	346	21·26	291	17·88	+ 3·38	60·69
Beswick	19495	254	76·75	403	20·67	281	14·41	+ 6·26	42·18
Blackley	25494	1158	22·02	398	15·61	316	12·40	+ 3·21	47·74
Bradford	23039	790	29·16	481	20·88	319	13·85	+ 7·03	51·97
Cheetham	20031	555	36·09	357	17·82	297	14·83	+ 2·99	50·42
Chorlton-cum-Hardy	37806	1666	22·69	616	16·29	490	12·96	+ 3·33	43·83
Collegiate Church	7386	446	16·56	198	26·81	186	25·18	+ 1·63	40·40
Collyhurst	11171	232	48·15	248	22·20	153	13·70	+ 8·50	52·42
Crumpsall	22054	2203	10·01	364	16·50	236	10·70	+ 5·80	60·44
Didsbury	28074	2354	11·93	418	14·89	335	11·93	+ 2·96	50·24
Exchange	75	61	1·23	2	26·67	1	13·33	+ 13·34	—
Gorton North	19796	604	32·77	317	16·01	285	14·40	+ 1·61	59·94
Gorton South	23853	628	37·98	372	15·60	340	14·25	+ 1·35	43·01
Harpurhey	16729	344	48·63	384	22·95	256	15·30	+ 7·65	65·10
Levenshulme	17823	606	29·41	275	15·43	254	14·25	+ 1·18	47·27
Longsight	23135	593	39·01	327	14·13	312	13·49	+ ·64	39·76
Medlock Street	13961	212	65·85	326	23·35	249	17·84	+ 5·51	88·96
Miles Platting	13213	313	42·21	288	21·80	203	15·36	+ 6·44	52·08
Moston	26473	1231	21·51	420	15·87	320	12·09	+ 3·78	50·00
Moss Side East	15127	241	62·77	321	21·22	232	15·34	+ 5·88	65·42
Moss Side West	17481	267	65·47	345	19·74	275	15·73	+ 4·01	92·75
New Cross	11495	303	37·94	222	19·31	259	22·53	— 3·22	22·52
Newton Heath	18873	1005	18·78	360	19·07	301	15·95	+ 3·12	25·00
Openshaw	16732	482	34·71	369	22·05	252	15·06	+ 6·99	62·33
Oxford	174	167	1·04	1	5·75	22	126·44	— 120·69	—
Rusholme	18232	806	22·62	293	16·07	257	14·10	+ 1·97	51·19
St. Ann's	16	55	·29	—	—	1	62·50	— 62·50	—
St. Clement's	684	181	3·78	13	19·01	14	20·47	— 1·46	—
St. George's	14639	266	55·03	347	23·70	250	17·08	+ 6·62	89·34
St. John's	1390	199	6·98	27	19·42	31	22·30	— 2·88	148·00
St. Luke's	18229	316	57·69	376	20·63	369	20·24	+ ·39	71·81
St. Mark's	17568	340	51·67	358	20·38	236	13·43	+ 6·95	36·31
St. Michael's	10454	243	43·02	262	25·06	199	19·04	+ 6·02	95·42
Withington	44608	1841	24·23	597	13·38	504	11·30	+ 2·08	38·53

Specified Causes, and (c) Infantile Mortalities, also the Percentages to Total Deaths of Inquest Cases and of Deaths in Public Institutions; also Quinquennial Averages, 1871—1945.

	Year	Estimated Population (Mean)	Marriage Rate per 1,000 persons living	Annual Rates per 1,000 persons living												Percentage to Total Deaths		Infant Mortality	Year
				Births	Deaths (all causes)	Smallpox	Measles	Scarlet Fever	Diphtheria	Whooping Cough	Typhus Fever	Typhoid and Paratyphoid Fever	Simple Continued Fever	Diarrhoea	Violence	Inquest Cases	Deaths in Public Institutions		
Quinquennial Average	1871–1875	477,344	24·6	38·9	28·3	0·26	0·64	1·08	0·08	0·78	0·14	0·43	0·21	1·95	0·94	7·2	13·4	198	.. 1871–1875
	1876–1880	509,802	18·6	38·7	26·2	0·24	0·53	1·07	0·13	0·84	0·08	0·29	0·11	1·26	0·89	7·5	14·3	172	.. 1876–1880
	1881–1885	542,746	17·9	35·1	23·6	0·04	0·71	0·48	0·10	0·68	0·05	0·20	0·03	0·99	0·72	7·0	15·9	175	.. 1881–1885
	1886–1890	575,630	16·6	33·4	24·6	0·02	0·83	0·50	0·32	0·54	0·02	0·30	0·01	1·08	0·78	6·9	17·7	183	.. 1886–1890
	1891–1895	517,801	16·9	33·2	23·6	0·03	0·62	0·26	0·27	0·64	0·00	0·24	0·01	1·19	0·77	7·1	19·2	186	.. 1891–1895
	1896–1900	539,599	18·2	32·5	22·7	..	0·89	0·20	0·13	0·53	0·00	0·18	0·01	1·69	0·73	7·1	20·2	192	.. 1896–1900
	1901–1905	554,355	17·4	30·9	20·1	0·01	0·55	0·19	0·22	0·41	0·00	0·13	0·00	1·15	0·72	7·1	24·4	173	.. 1901–1905
	1906–1910	660,049	17·0	28·1	17·7	..	0·54	0·16	0·17	0·37	0·00	0·10	0·00	0·76	0·68	7·4	27·3	147	.. 1906–1910
	1911–1915	720,565	17·9	25·3	16·5	..	0·51	0·12	0·14	0·26	..	0·06	..	0·83	0·66	7·4	29·2	133	.. 1911–1915
	1916–1920	B 746,909 D 699,325	18·4	19·9	15·7	..	0·28	0·04	0·08	0·24	..	0·02	0·00	0·33	0·55	6·3	29·7	105	.. 1916–1920
	1921–1925	751,080	16·8	20·6	13·9	..	0·25	0·07	0·10	0·21	..	0·01	..	0·31	0·45	5·7	37·4	96	.. 1921–1925
	1926–1930	752,840	16·6	17·5	13·9	..	0·18	0·02	0·11	0·14	..	0·01	..	0·29	0·50	4·8	42·8	88	.. 1926–1930
	1931–1935	759,180	17·1	15·3	13·4	..	0·11	0·02	0·10	0·08	..	0·00	..	0·15	0·54	4·8	48·3	77	.. 1931–1935
	1936–1940	712,660	21·4	15·2	14·3	..	0·07	0·00	0·09	0·04	..	0·00	..	0·10	0·70	4·9	52·0	71	.. 1936–1940
	1941–1945	608,256	20·9	18·1	15·0	..	0·02	0·00	0·04	0·06	..	0·00	..	0·15	0·68	5·1	50·7	64	.. 1941–1945
	1941	601,840	23·8	16·4	16·4	..	0·03	0·01	0·08	0·11	..	..	..	0·19	1·19	6·4	50·7	84	 1941
	1942	601,900	21·7	17·1	14·7	..	0·03	0·00	0·05	0·03	..	0·01	..	0·15	0·57	4·7	53·4	65	 1942
	1943	599,300	17·3	18·7	15·5	..	0·02	0·00	0·05	0·07	..	0·00	..	0·15	0·59	5·1	53·6	61	 1943
	1944	614,760	18·0	19·9	14·2	..	0·02	..	0·01	0·04	..	..	..	0·12	0·57	4·9	49·5	54	 1944
	1945	623,480	23·8	18·2	14·4	..	0·01	..	0·02	0·04	..	0·00	..	0.14	0·50	4·2	46·5	56	 1945

The populations and rates prior to 1891 are those for the Unions of Manchester, Chorlton, and Prestwich, which have been taken as approximately representing "Manchester." The City was extended to include Moss Side and Withington in November, 1904, Gorton and Levenshulme in November, 1909, and Wythenshawe, April, 1931.

From 1911 population and rates based on Registrar-General's returns.

(B)—Population for calculating birth-rates

(D)—Population for calculating death-rates

Manchester—Annual Rates of Mortality from certain causes of Death.

YEAR	ANNUAL RATES PER 1,000 PERSONS LIVING									RATES PER 1,000 BIRTHS*	
	Cancer	Tuberculosis of Respiratory System	Other Forms of Tuberculosis	Diseases of Nervous System	Diseases of Heart	Diseases of Respiratory System	Diseases of Digestive System	Nephritis	Diseases of Generative System	Puerperal and Post Abortive Sepsis	Other Puerperal Causes
1881–1885 ..	0·50	2·42	0·92	3·28	1·37	5·41	1·23	..	0·08	3·03	1·99
1886–1890 ..	0·64	2·24	0·95	3·09	1·73	5·76	1·23	..	0·08	3·22	2·13
1891–1895 ..	0·62	2·09	0·97	1·74	2·53	5·56	1·07	..	0·07	2·75	3·42
1896–1900 ..	0·73	2·04	0·82	1·32	2·54	5·03	1·04	..	0·09	1·55	1·51
1901–1905 ..	0·80	1·91	0·71	1·17	1·74	4·24	1·87	0·41	0·08	1·21	1·76
1906–1910 ..	0·88	1·66	0·59	0·95	1·72	3·77	1·42	0·44	0·07	1·28	1·49
1911–1915 ..	1·04	1·67	0·47	0·79	1·24	3·62	1·44	0·46	0·09	1·42	2·56
1916–1920 ..	1·21	1·61	0·41	0·54	1·21	3·41	0·84	0·41	0·06	1·70	2·14
1921–1925 ..	1·36	1·27	0·30	0·51	1·39	3·11	0·74	0·34	0·07	1·83	2·10
1926–1930 ..	1·50	1·19	0·21	0·48	1·81	2·65	0·75	0·36	0·07	2·14	2·63
1931–1935 ..	1·67	1·02	0·16	0·41	2·50	1·97	0·55	0·37	0·05	*1·59	*2·20
1936–1940 ..	1·81	0·93	0·14	0·38	3·10	2·07	0·53	0·37	0·06	1·11	2·40
1941–1945 ..	2·10	0·93	0·14	†1·62	3·10	2·39	0·65	0·37	0·03	0·71	1·30
1941..	2·09	1·13	0·19	†1·76	3·13	2·81	0·71	0·39	0·05	0·97	1·56
1942..	2·09	0·99	0·13	1·64	3·22	2·13	0·62	0·39	0·04	0·65	1·68
1943..	2·14	0·91	0·16	1·53	3·06	2·64	0·71	0·37	0·01	1·04	1·29
1944..	2·09	0·80	0·11	1·58	3·17	2·04	0·58	0·37	0·01	0·64	1·19
1945..	2·08	0·80	0·13	1·60	2·93	2·33	0·61	0·34	0·03	0·25	0·77

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* Maternal Mortality rates until 1939 were based on per 1,000 Live Births. From 1931 onwards these rates were calculated on per 1,000 Live and Stillbirths.

† Diseases of Nervous System includes Cerebral Hæmorrhage from 1941. From 1911 rates are based on Registrar General's Returns.

Manchester, 1945—Deaths in Wards for Various Diseases and Death Rates per 1,000 of the Population.

(Manchester Figures, 52 Weeks.)

Wards	Population	Scarlet Fever		Whooping Cough		Diphtheria		M asles		Tuberculosis All Forms		Syphilitic Diseases		Cancer All Sites		Pneumonia		Bronchitis		Digestive System		Urinary System		All Causes	
		Deaths	Rate	Deaths	Rate	Deaths	Rate	Deat	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
City of Manchester..	623480	—	—	24	·04	14	·02	8	·01	575	·92	40	·06	1282	2·06	354	·57	984	1·58	372	·60	328	·53	8920	14·31
All Saints'	11670	—	—	3	·26	—	—	—	—	19	1·63	1	·09	19	1·63	15	1·29	23	1·97	13	1·11	10	·86	229	19·62
Ardwick	16276	—	—	—	—	—	—	—	—	26	1·60	2	·12	36	2·21	9	·55	30	1·84	16	·98	8	·49	291	17·88
Beswick	19495	—	—	1	·05	1	·05	—	—	23	1·18	—	—	44	2·26	11	·56	29	1·49	14	·72	8	·41	281	14·41
Blackley	25494	—	—	—	—	1	·04	—	—	12	·47	4	·16	44	1·73	14	·55	31	1·22	15	·59	13	·51	316	12·39
Bradford	23039	—	—	1	·04	—	—	—	—	32	1·39	—	—	48	2·08	17	·74	32	1·39	12	·52	13	·56	319	13·85
Cheetham	20031	—	—	—	—	—	—	—	—	7	·35	3	·15	51	2·55	9	·45	26	1·30	10	·50	13	·65	297	14·83
Chorlton-cum-Hardy	37806	—	—	—	—	—	—	—	—	27	·71	2	·05	90	2·38	13	·34	44	1·16	19	·50	22	·58	490	12·96
Collegiate Church	7386	—	—	—	—	—	—	—	—	12	1·62	1	·14	23	3·11	5	·68	24	3·25	9	1·22	7	·95	186	25·18
Collyhurst	11171	—	—	—	—	1	·09	—	—	12	1·07	—	—	17	1·52	2	·18	29	2·60	6	·54	6	·54	153	13·70
Crumpsall	22054	—	—	1	·05	—	—	—	—	8	·36	1	·05	35	1·59	6	·27	24	1·09	4	·18	7	·32	236	10·70
Didsbury	28074	—	—	—	—	—	—	—	—	8	·28	—	—	53	1·89	9	·32	21	·75	10	·36	12	·43	335	11·93
Exchange	75	—	—	—	—	—	—	—	—	—	—	—	—	1	13·33	—	—	—	—	—	—	—	—	1	13·33
Gorton North	19796	—	—	2	·10	—	—	—	—	18	·91	1	·05	42	2·12	13	·66	29	1·46	11	·56	8	·40	285	14·40
Gorton South	23853	—	—	1	·04	—	—	—	—	23	·96	5	·21	49	2·05	7	·29	38	1·59	13	·55	12	·50	340	14·25
Harpurhey	16729	—	—	—	—	2	·12	—	—	9	·54	—	—	37	2·21	13	·78	42	2·51	19	1·14	13	·78	256	15·30
Levenshulme	17823	—	—	—	—	—	—	—	—	16	·90	3	·17	38	2·13	9	·50	19	1·07	15	·84	9	·50	254	14·25
Longsight	23135	—	—	1	·04	1	·04	—	—	24	1·04	—	—	44	1·90	19	·82	34	1·47	13	·56	8	·35	312	13·49
Medlock Street	13961	—	—	—	—	2	·14	—	—	18	1·29	1	·07	38	2·72	20	1·43	33	2·36	10	·72	6	·43	249	17·84
Miles Platting	13213	—	—	1	·08	—	—	2	·15	18	1·36	1	·08	28	2·12	9	·68	27	2·04	7	·53	5	·38	203	15·36
Moston	26473	—	—	3	·11	—	—	1	·04	16	·60	1	·04	42	1·59	17	·64	32	1·21	16	·60	15	·57	320	12·09
Moss Side East	15127	—	—	—	—	—	—	—	—	14	·93	—	—	36	2·38	5	·33	20	1·32	7	·46	7	·46	232	15·34
Moss Side West	17481	—	—	—	—	—	—	—	—	18	1·03	4	·23	41	2·35	9	·51	34	1·94	13	·74	10	·57	275	15·73
New Cross	11495	—	—	—	—	1	·09	—	—	19	1·65	2	·17	28	2·44	13	1·13	29	2·52	10	·87	7	·61	259	22·53
Newton Heath	18873	—	—	—	—	1	·05	—	—	16	·85	—	—	33	1·75	10	·53	43	2·28	8	·42	21	1·11	301	15·95
Openshaw	16732	—	—	2	·12	1	·06	—	—	14	·84	—	—	43	2·57	15	·90	33	1·97	12	·72	7	·42	252	15·06
Oxford	174	—	—	—	—	—	—	—	—	1	5·75	—	—	1	5·75	3	17·24	1	5·75	1	5·75	—	—	22	126·44
Rusholme	18232	—	—	—	—	—	—	—	—	14	·77	—	—	40	2·19	12	·66	19	1·04	8	·44	5	·27	257	14·10
St. Ann's	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	62·50
St. Clement's	684	—	—	—	—	—	—	—	—	1	1·46	—	—	2	2·92	2	2·92	1	1·46	1	1·46	1	1·46	14	20·47
St. George's	14639	—	—	2	·14	—	—	—	—	20	1·37	1	·07	29	1·98	16	1·09	40	2·73	12	·82	11	·75	250	17·08
St. John's	1390	—	—	—	—	—	—	—	—	4	2·88	—	—	4	2·88	—	—	7	5·04	2	1·44	1	·72	31	22·30
St. Luke's	18229	—	—	1	·05	—	—	1	·05	36	1·97	4	·22	41	2·25	9	·49	52	2·85	19	1·04	6	·33	369	20·24
St. Mark's	17568	—	—	1	·06	1	·06	2	·11	12	·68	—	—	33	1·88	9	·51	37	2·11	8	·46	11	·63	236	13·43
St. Michael's	10454	—	—	1	·10	2	·19	1	·10	14	1·34	—	—	28	2·68	11	1·05	32	3·06	5	·48	5	·48	199	19·04
Withington	44608	—	—	3	·07	—	—	1	·02	32	·72	2	·04	84	1·88	11	·25	46	1·03	18	·40	28	·63	504	11·30
Wythenshawe..	40224	—	—	—	—	—	—	—	—	32	·80	1	·02	60	1·49	12	·30	23	·57	16	·40	13	·32	365	9·07

Manchester, 1945—Certification of the Causes of Death in the City and in the Various Wards.

(*Manchester figures,* 52 *weeks.*)

WARDS	Total Deaths	Certified by		Not Certified	Percentage to Total Deaths			Deaths in Institutions	
					Certified by				
		Regist'd Medical Practitioners	Inquest		Regist'd Medical Practitioners	Inquest	Not Certified	No.	% to Total.
City	8,920	8,490	374	56	95·18	4·19	0·63	4,145	46·47
All Saints	229	214	14	1	93·45	6·11	0·44	127	55·46
Ardwick	291	276	13	2	94·84	4·47	0·69	145	49·83
Beswick	281	269	12	...	95·73	4·27	...	113	40·21
Blackley	316	300	14	2	94·94	4·43	0·63	154	48·73
Bradford	319	307	11	1	96·24	3·45	0·31	125	39·18
Cheetham	297	280	14	3	94·28	4·72	1·00	160	53·87
Chorlton-cum-Hardy	490	467	20	3	95·31	4·08	0·61	183	37·35
Collegiate Church	186	174	11	1	93·55	5·91	0·54	123	66·13
Collyhurst	153	147	5	1	96·08	3·27	0·65	77	50·33
Crumpsall	236	225	9	2	95·34	3·81	0·85	103	43·64
Didsbury	335	322	12	1	96·12	3·58	0·30	127	38·51
Exchange	1	1	...	...	100·00	...	...	1	100·00
Gorton North	285	270	11	4	94·74	3·86	1·40	105	36·84
Gorton South	340	323	16	1	95·00	4·71	0·29	150	44·12
Harpurhey	256	246	10	...	96·09	3·91	...	128	50·00
Levenshulme	254	237	14	3	93·31	5·51	1·18	102	40·16
Longsight	312	296	14	2	94·87	4·49	0·64	126	40·38
Medlock Street	249	238	7	4	95·58	2·81	1·61	118	47·39
Miles Platting	203	191	11	1	94·09	5·42	0·49	106	52·22
Moston	320	312	7	1	97·50	2·19	0·31	133	41·56
Moss Side East	232	216	16	...	93·10	6·90	...	116	50.00
Moss Side West	275	265	9	1	96·36	3·27	0·37	127	46·18
New Cross	259	246	10	3	94·98	3·86	1·16	148	57·14
Newton Heath	301	282	19	...	93·69	6·31	...	157	52·16
Openshaw	252	239	10	3	94·84	3·97	1·19	105	41·67
Oxford	22	21	1	...	95.45	4·55	...	22	100.00
Rusholme	257	243	13	1	94·55	5·06	0·39	107	41·63
St. Ann's	1	1	...	...	100·00	...	...	1	100·00
St. Clement's	14	13	...	1	92·86	...	7·14	8	57·14
St. George's	250	234	13	3	93·60	5·20	1·20	147	58·80
St. John's	31	30	1	...	96·77	3·23	...	23	74·19
St. Luke's	369	355	11	3	96·21	2·98	0·81	202	54·74
St. Mark's	236	221	12	3	93·64	5·08	1·28	109	46·18
St. Michael's	199	192	6	1	96.48	3·01	0·51	111	55·78
Withington	504	489	13	2	97·02	2·58	0·40	192	38·09
Wythenshawe	365	348	15	2	95·34	4·11	0·55	164	44·93

Manchester, 1945—Causes of Death in Infancy and Childhood.

(*Manchester figures, 52 weeks.*)

Causes of Death	Under One Year			Total under One Year	One and under Five Years				Total under Five Years
	Under 3 months	3–6 months	6–12 months		1–	2–	3–	4–	
All Causes	454	95	79	628	42	29	19	20	738
Chicken Pox	...	...	...	...	...	...	...	...	...
Measles	...	1	2	3	2	3	...	...	8
Scarlatina	...	...	...	...	...	...	...	...	...
Whooping Cough	2	3	7	12	3	2	3	3	23
Diphtheria	...	...	...	...	1	...	1	...	2
Erysipelas	...	...	...	.	...	...	...	...	...
Syphilis	2	3	..	5	...	...	...	...	5
Tabes Mesenterica and Tuberc. Peritonitis	...	...	...	...	...	...	...	...	...
Tubercular Meningitis	...	1	1	2	6	3	4	2	17
Tuberculosis (Other)	...	1	4	5	5	2	1	1	14
Rickets	...	...	...	...	...	...	...	...	...
Premature Birth	126	2	...	128	...	...	...	...	128
Injury at Birth and Congen. Malformations	113	10	3	126	2	...	1	1	130
Atelectasis	23	...	1	24	...	...	...	...	24
Others of early infancy	41	3	...	44	...	...	...	...	44
Convulsions	10	2	1	13	1	...	..	...	14
Meningitis	1	...	2	3	2	...	...	...	5
Nervous Diseases (Other)	4	...	3	7	1	1	...	...	9
Diarrhœal Diseases	43	23	20	86	2	1	...	1	90
Gastritis	...	...	...	...	...	...	...	...	...
Digestive Diseases (Other)	4	1	1	6	1	4	1	3	15
Bronchitis	19	3	7	29	3	...	...	...	32
Pneumonia	51	31	14	96	4	5	1	1	107
Respiratory Diseases (Other)	3	1	1	5	...	...	...	...	5
Found Dead in Bed (overlaid)	4	...	2	6	...	...	...	...	6
Suffocation	1	1	1	3	...	...	...	...	3
Violence (Other forms)	1	2	3	6	3	6	5	5	25
Ill-defined Causes	...	...	...	...	...	...	...	...	...
Unclassified	6	7	6	19	6	2	2	3	32

INFANT MORTALITY.

Deaths from Various Causes per 1,000 Live Births.

Calculated from Registrar General's Return.

Cause of Death	Rate per 1,000 Live Births					
	1940	1941	1942	1943	1944	1945
All causes	70·18	84·47	64·52	60·88	53·59	55·80
Typhoid and Paratyphoid Fevers	..	..	..	..	..	..
Cerebro Spinal Fever	1·25	1·01	0·39	0·36	0·16	0·44
Scarlet Fever	..	..	..	..	..	..
Whooping Cough	0·29	3·35	0·97	1·61	1·06	1·06
Diphtheria	0·10	0·10	0·29	..	..	..
Tuberculosis of Respiratory System	0·29	..	0·10	0·09	..	0·26
Other forms of Tuberculosis	0·29	0·20	0·49	0·27	0·41	0·35
Syphilitic Diseases	0·10	0·51	0·78	0·63	0·41	0·53
Influenza	0·87	0·71	0·10	0·45	0·33	0·18
Measles	0·96	0·81	0·39	0·27	0·16	0·26
Acute Poliomyelitis and Polioencephalitis	..	..	..	..	..	..
Acute Infectious Encephalitis	..	..	..	..	..	..
Cancer of all Sites	0·10	..	..	..	..	..
Intra-Cranial Vascular Lesions	..	..	0·10	..	..	0·26
Heart Disease	0·10	..	..	..	..	..
Other Diseases of Circulatory System	..	0·10	..	..	..	..
Bronchitis	4·33	3·76	1·46	2·95	1·39	2·55
Pneumonia	12·51	14·01	8·37	10·10	8·93	8·54
Other Respiratory Diseases	0·19	0·30	0·58	0·54	0·24	0·44
Diarrhoea (under 2 years)	6·74	11·07	8·56	7·60	5·90	7·30
Other Digestive Diseases	1·54	1·83	1·26	0·89	0·65	0·53
Nephritis	..	0·10	..	0·09	..	..
Premature Birth	14·05	17·87	18·20	14·93	13·44	11·35
Congenital Malformations, Birth Injuries, and Infantile Diseases	18·19	17·26	16·35	14·93	14·50	16·63
Violent Causes	2·31	2·54	1·07	0·89	1·88	1·41
All other causes	5·97	8·93	5·06	4·29	4·10	3·70

INFANT MORTALITY.

Deaths per 1,000 Births at the ages of 0—2 months, 3—5 months, and 6—11 months in successive years.

Years	Months of Age			
	0-2	3-5	6-11	Under 1 year
1891–1895 (mean) ..	82·79	40·99	62·97	186·75
1896–1900 (mean) ..	83·44	42·43	66·28	192·16
1901–1905 (mean) ..	81·02	37·52	54·24	172·78
1906–1910 (mean) ..	73·89	29·12	44·27	147·28
1911–1915 (mean) ..	69·23	24·38	39·26	132·88
1916–1920 (mean) ..	58·46	17·72	28·65	104·82
1921–1925 (mean) ..	52·46	15·63	27·38	95·45
1926–1930 (mean) ..	49·77	15·76	22·33	87·86
1931–1935 (mean) ..	49·01	11·92	15·97	76·90
1936–1940 (mean) ..	45·79	11·95	13·05	70·81
1941–1945 (mean) ..	42·14	12·14	9·57	63·85
1941	48·02	20·61	15·84	84·47
1942	43·89	11·68	8·95	64·52
1943	41·57	11·26	8·05	60·88
1944	37·28	8·77	7·54	53·59
1945	39·96	8·36	7·48	55·80

Total Legitimate and Illegitimate Live Births in England and Wales and Manchester, with Illegitimate Percentages.
From Registrar-General's Return.

YEAR	Live Births, England and Wales				Live Births, Manchester			
	Total	Legitimate	Illegitimate	Illegitimate % of total live births	Total	Legitimate	Illegitimate	Illegitimate % of total live births
1911	881,138	843,505	37,633	4·27	18,595	17,794	801	4·31
1912	872,737	835,209	37,528	4·30	18,311	17,576	735	4·01
1913	881,890	843,981	37,909	4·30	18,791	18,018	773	4·11
1914	879,096	841,767	37,329	4·25	18,779	17,972	807	4·30
1915	814,614	778,369	36,245	4·45	16,696	15,956	740	4·43
1916	785,520	747,831	37,689	4·80	15,597	14,901	696	4·46
1917	668,346	631,189	37,157	5·56	12,937	12,195	742	5·74
1918	662,773	621,620	41,153	6·21	12,926	12,053	873	6·75
1919	692,438	650,562	41,876	6·05	13,686	12,758	928	6·78
1920	957,994	913,727	44,267	4·62	19,213	18,253	960	4·99
1921	848,814	810,196	38,618	4·52	17,549	16,647	902	5·14
1922	780,124	745,986	34,138	4·38	15,787	15,013	774	4·90
1923	758,131	726,609	31,522	4·16	15,388	14,677	711	4·62
1924	729,933	699,637	30,296	4·15	14,483	13,826	657	4·54
1925	710,582	681,686	28,896	4·07	14,162	13,493	669	4·72
1926	694,563	664,972	29,591	4·26	13,969	13,290	679	4·86
1927	654,172	625,149	29,023	4·35	13,036	12,388	648	4·97
1928	660,267	630,565	29,702	4·50	12,902	12,256	646	5·01
1929	643,673	614,366	29,307	4·55	13,058	12,380	678	5·19
1930	648,811	619,129	29,682	4·57	12,851	12,178	673	5·24
1931	632,081	603,995	28,086	4·44	12,337	11,694	643	5·21
1932	613,972	586,961	27,011	4·39	11,825	11,206	619	5·24
1933	580,413	555,005	25,408	4·37	11,156	10,582	574	5·15
1934	597,642	571,857	25,785	4·31	11,555	10,974	581	5·03
1935	598,756	573,651	25,105	4·19	11,379	10,842	537	4·72
1936	605,292	580,397	24,895	4·11	11,231	10,681	550	4·90
1937	610,557	585,216	25,341	4·15	10,786	10,268	518	4·80
1938	621,204	594,825	26,379	4·25	11,025	10,468	557	5·05
1939	619,352	593,410	25,942	4·19	10,378	9,807	571	5·50
1940	607,029	581,156	25,873	4·26	10,388	9,873	515	4·96
1941	587,228	556,297	30,931	5·27	9,849	9,239	610	6·19
1942	654,039	617,845	36,194	5·53	10,276	9,680	596	5·80
1943	682,654	639,549	43,105	6·31	11,185	10,431	754	6·74
1944	745,318	692,933	52,385	7·03	12,204	11,239	965	7·91
1945		Not yet	available.		11,362	10,175	1187	10·45

Deaths of Infants under One Year of Age.
Manchester.
From Registrar-General's Return.

Year	Total live births	Total deaths under one year	Deaths per 1,000 of the total live births	Legitimate births	Legitimate deaths	Deaths per 1,000 legitimately born	Illegitimate births	Illegitimate deaths	Deaths per 1,000 illegitimately born
1911	18,595	2,908	156·38	17,794	2,646	148·70	801	262	327·09
1912	18,311	2,251	122·93	17,576	2,082	118,46	735	169	229·93
1913	18,791	2,415	128·52	18,018	2,239	124·26	773	176	227·68
1914	18,779	2,423	129·03	17,972	2,218	123·41	807	205	254·03
1915	16,696	2,141	128·24	15,956	1,959	122·78	740	182	245·95
1916	15,597	1,737	111·37	14,901	1,578	105·90	696	159	228·45
1917	12,937	1,438	111·15	12,196	1,262	103·48	742	176	237·20
1918	12,926	1,381	106·83	12,053	1,201	100·00	873	180	206·19
1919	13,686	1,333	97·40	12,758	1,173	91·94	928	160	172·41
1920	19,213	1,882	97·95	18,253	1,169	91·44	960	213	221·88
1921	17,549	1,713	97·61	16,647	1,542	92·63	902	171	189·58
1922	15,787	1,525	96·60	15,013	1,375	91·59	774	150	193·80
1923	15,388	1,360	88·35	14,677	1,243	84·69	711	117	164·56
1924	14,483	1,454	100·39	13,826	1,316	95·18	657	138	210·05
1925	14,162	1,364	96·31	13,493	1,251	92·72	669	113	168·91
1926	13,969	1,216	87·05	13,290	1,116	83·97	679	100	147·28
1927	13,036	1,122	86·07	12,388	1,032	83·31	648	90	138·89
1928	12,902	1,179	91·38	12,256	1,084	88·44	646	95	147·06
1929	13,058	1,272	97·41	12,380	1,144	92·41	678	128	188·79
1930	12,851	995	77·43	12,178	881	72·34	673	114	169·39
1931	12,337	1,049	85·03	11,694	956	81·75	643	93	144·64
1932	11,825	1,015	85·83	11,206	934	83·35	619	81	130·86
1933	11,156	834	74·76	10,582	769	72·67	574	65	113·24
1934	11,155	798	69·06	10,974	742	67·61	581	56	96·39
1935	11,379	809	71·09	10,842	757	69·82	537	52	96·83
1936	11,231	863	76·84	10,681	816	76·40	550	47	85·45
1937	10,786	823	76·30	10,268	770	74·99	518	53	102·32
1938	11,025	761	69·03	10,468	702	67·06	557	59	105·92
1939	10,378	634	61·09	9,807	587	59·85	571	47	82·31
1940	10,388	729	70·18	9,873	677	68·57	515	52	100·97
1941	9,849	832	84·47	9,239	767	83·02	610	65	106·56
1942	10,276	663	64·52	9,680	621	64·15	596	42	70·47
1943	11,185	681	60·88	10,431	625	59·92	754	56	74·27
1944	12,204	654	53·59	11,239	577	51·34	965	77	79·79
1945	11,362	634	55·80	10,175	557	54·74	1187	77	64·87

Distinguishing Legitimate and Illegitimate Births,
also the Proportion of Mortality among Infants of both Classes under One Year of Age.

(*Manchester Figures, 52 Weeks.*)

WARDS	Live Births				Deaths under 1 Year					
	Total	Legitimate	Illegitimate	% Illegitimate to Total Live Births	Total	Legitimate	Illegitimate	Rate per 1000 Live Births Total	Rate per 1000 Live Births Legitimate	Rate per 1000 Live Births Illegitimate
City of Manchester	11362	10175	1187	10·45	628	558	70	55·27	54·84	58·97
All Saints'	293	235	58	19·80	20	15	5	68·26	63·83	86·21
Ardwick	346	302	44	12·72	21	21	—	60·69	69·54	—
Beswick	403	378	25	6·20	17	17	—	42·18	44·97	—
Blackley	398	364	34	8·54	19	17	2	47·74	46·70	58·82
Bradford	481	451	30	6·24	25	20	5	51·97	44·35	166·67
Cheetham	357	321	36	10·08	18	17	1	50·42	52·96	27·78
Chorlton-cum-Hardy	616	572	44	7·14	27	27	—	43·83	47·20	—
Collegiate Church	198	171	27	13·64	8	3	5	40·40	17·54	185·19
Collyhurst	248	219	29	11·69	13	9	4	52·42	41·10	137·93
Crumpsall	364	337	27	7·42	22	22	—	60·44	65·28	—
Didsbury	418	376	42	10·05	21	17	4	50·24	45·21	95·24
Exchange	2	2	—	—	—	—	—	—	—	—
Gorton North	317	293	24	7·57	19	18	1	59·94	61·43	41·67
Gorton South	372	341	31	8·33	16	15	1	43·01	43·99	32·26
Harpurhey	384	355	29	7·55	25	24	1	65·10	67·61	34·48
Levenshulme	275	247	28	10·18	13	12	1	47·27	48·58	35·71
Longsight	327	287	40	12·23	13	12	1	39·76	41·81	25·00
Medlock Street	326	277	49	15·03	29	26	3	88·96	93·86	61·22
Miles Platting	288	266	22	7·64	15	12	3	52·08	45·11	136·36
Moston	420	392	28	6·67	21	20	1	50·00	51·02	35·71
Moss Side East	321	262	59	18·38	21	17	4	65·42	64·89	67·80
Moss Side West	345	305	40	11·59	32	26	6	92·75	85·25	150·00
New Cross	222	201	21	9·46	5	5	—	22·52	24·88	—
Newton Heath	360	322	38	10·56	9	9	—	25·00	27·95	—
Openshaw	369	335	34	9·21	23	22	1	62·33	65·67	29·41
Oxford	1	—	1	100·00	—	—	—	—	—	—
Rusholme	293	256	37	12·63	15	13	2	51·19	50·78	54·05
St. Ann's	—	—	—	—	—	—	—	—	—	—
St. Clement's	13	11	2	15·39	—	—	—	—	—	—
St. George's	347	286	61	17·58	31	25	6	89·34	87·41	98·36
St. John's	27	20	7	25·93	4	2	2	148·00	100·00	285·70
St. Luke's	376	305	71	18·88	27	23	4	71·81	75·41	56·34
St. Mark's	358	311	47	13·13	13	11	2	36·31	35·37	42·55
St. Michael's	262	230	32	12·21	25	23	2	95·42	100·00	62·50
Withington	597	548	49	8·21	23	22	1	38·53	40·15	20·41
Wythenshawe	638	597	41	6·43	38	36	2	59·56	60·30	48·78

Stillbirths, Neo-Natal Deaths, and Deaths at Four Weeks to One Year of Age per 1,000 Births (Live and Stillbirth), also Infant Death Rate per 1,000 Live Births.

Manchester.

Year	Total live and stillbirths	STILLBIRTHS		NEO-NATAL DEATHS		DEATHS, 4 WEEKS—1 YEAR		DEATHS UNDER 1 YEAR AND STILLBIRTHS		Infant death rate per 1,000 live births
		Number of stillbirths	Rate per 1,000 live and stillbirths	Number of neo-natal deaths, 0—4 weeks	Rate per 1,000 total live and stillbirths	Number of deaths, 4 weeks—1 year	Rate per 1,000 total live and stillbirths	Number of deaths under 1 year and stillbirths	Rate per 1,000 total live and stillbirths	
1928	13,533	631	46·63	453	33·47	726	53·65	1,810	133·75	91·38
1929	13,686	628	45·89	489	35·73	783	57·22	1,900	138·84	97·41
1930	13,490	639	47·37	413	30·62	582	43·14	1,634	121·13	77·43
1931	12,965	628	48·44	417	32·16	632	48·75	1,677	129·35	85·03
1932	12,386	561	45·29	418	33·75	597	48·20	1,576	127·24	85·83
1933	11,738	582	49·58	385	32·80	449	38·25	1,416	120·63	74·76
1934	12,090	535	44·25	390	32·26	408	33·75	1,333	110·26	69·06
1935	11,925	546	45·79	381	31·95	428	35·89	1,355	113·63	71·09
1936	11,762	531	45·15	385	32·73	478	40·64	1,394	118·52	76·84
1937	11,254	468	41·59	381	33·86	442	39·28	1,291	114·71	76·30
1938	11,532	507	43·96	351	30·44	410	35·55	1,268	109·95	69·03
1939	10,870	492	45·26	321	29·53	313	28·80	1,126	103·59	61·09
1940	10,866	478	43·99	295	27·15	434	39·94	1,207	111·08	70·18
1941	10,249	400	39·03	292	28·49	540	52·69	1,232	120·21	84·47
1942	10,719	443	41·33	304	28·36	359	33·49	1,106	103·18	64·52
1943	11,591	406	35·02	306	26·40	375	32·35	1,087	93·77	60·88
1944	12,571	367	29·19	315	25·06	339	26·97	1,021	81·22	53·59

Notifiable Infectious Diseases other than Tuberculosis.

The following cases were notified in the various Wards of the City during the r ended December 31st, 1945 :—

	Typhoid Fever	Paratyphoid Fevers	Cerebro-spinal Fever	Scarlet Fever	Whooping Cough	Diphtheria		Ophthalmia Neonatorum	Dysentery	Malaria (contracted in England & Wales)	Relapsing Fever	Smallpox	Measles	Poliomyelitis (acute)	Polio-encephalitis (acute)	Encephalitis Lethargica (acute)	Typhus Fever	Lobar Pneumonia	Broncho Pneumonia	Pneumonia (other)	Influenzal Pneumonia	Pneumonia (total)	Puerperal Fever and Pyrexia	German Measles	Pemphigus Neonatorum	Total Cases of Infectious Disease
Total for City	9	—	44	1,140	1,835	302	14	82	413	1	—	—	5,596	6	—	—	—	587	207	19	44	857	199	358	20	11,009
WARDS																										
ALL SAINTS'	8	—	3	19	46	6		2	7	—	—	—	26	2	—	—	—	12	8	—	—	20	12	4	1	160
ARDWICK	—	—	—	27	19	5		4	3	—	—	—	91	1	—	—	—	14	6	—	1	21	8	7	1	188
BESWICK	—	—	1	19	90	9		2	3	—	—	—	194	—	—	—	—	20	6	—	—	26	7	15	—	372
BLACKLEY	—	—	1	58	51	24		2	10	—	—	—	221	—	—	—	—	15	7	2	2	26	5	9	1	411
BRADFORD	—	—	—	29	80	16		2	11	—	—	—	290	—	—	—	—	36	6	—	1	43	3	12	—	491
CHEETHAM	—	—	—	56.	46	3		3	3	—	—	—	229	—	—	—	—	10	5	—	7	22	2	10	—	379
CHORLTON-CUM-HARDY	—	—	1	64	119	7		5	10	—	—	—	189	—	—	—	—	17	2	1	4	24	8	27	—	457
COLLEGIATE CHURCH	—	—	1	11	13	7		2	4	—	—	—	97	—	—	—	—	6	3	—	3	12	3	1	—	155
COLLYHURST	—	—	3	15	25	12		—	2	—	—	—	216	—	—	—	—	14	1	—	1	16	4	—	—	296
CRUMPSALL	—	—	1	55	32	7		—	4	—	—	—	201	—	—	—	—	27	4	—	5	36	2	8	2	352
DIDSBURY	—	—	2	51	104	12		—	4	—	—	—	151	—	—	—	—	4	4	—	—	8	4	33	—	378
EXCHANGE	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
GORTON NORTH	—	—	—	24	70	6		3	13	1	—	—	258	—	—	—	—	21	20	2	—	43	5	18	1	450
GORTON SOUTH	1	—	1	47	49	10		9	7	—	—	—	222	—	—	—	—	22	5	2	2	31	3	18	6	409
HARPURHEY	—	—	2	40	33	15		3	10	—	—	—	227	—	—	—	—	10	2	1	1	14	4	4	—	356
LEVENSHULME	—	—	—	27	22	2		—	1	—	—	—	78	—	—	—	—	7	1	—	1	9	2	5	—	148
LONGSIGHT	—	—	1	30	99	5		1	2	—	—	—	98	1	—	—	—	20	6	3	—	29	9	9	1	287
MEDLOCK STREET	—	—	3	15	43	27		—	6	—	—	—	36	—	—	—	—	18	10	—	1	29	5	1	1	171
MILES PLATTING	—	—	1	39	28	7		2	1	—	—	—	347	—	—	—	—	28	4	—	2	34	12	6	1	482
MOSTON	—	—	3	66	48	7	1	3	5	—	—	—	232	—	—	—	—	11	5	1	3	20	8	7	2	402
MOSS SIDE EAST	—	—	1	17	43	2	1	3	4	—	—	—	82	—	—	—	—	27	5	—	—	32	10	8	—	203
MOSS SIDE WEST	—	—	1	13	23	5		3	8	—	—	—	86	—	—	—	—	10	7	—	—	17	8	2	—	171
NEW CROSS	—	—	1	26	32	21	4	2	2	—	—	—	230	—	—	—	—	23	11	—	—	34	5	1	—	358
NEWTON HEATH	—	—	1	29	61	6		5	1	—	—	—	151	—	—	—	—	37	13	—	8	58	9	7	—	337
OPENSHAW	—	—	2	19	70	10		6	25	—	—	—	226	—	—	—	—	35	11	—	—	46	7	20	1	437
OXFORD	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	3	—	—	—	3	—	—	—	4
RUSHOLME	—	—	4	30	86	—	3	2	3	—	—	—	87	—	—	—	—	10	4	—	—	14	3	15	—	247
ST. ANN'S	—	—	—	—	—	—	—	—	1	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—	—	4
ST. CLEMENT'S	—	—	—	1	—	—	1	—	1	—	—	—	12	—	—	—	—	—	—	—	—	—	1	—	—	16
ST. GEORGE'S	—	—	—	15	60	16	6	6	11	—	—	—	55	1	—	—	—	29	8	—	—	37	7	2	—	216
St. JOHN'S	—	—	—	2	—	—	—	—	—	—	—	—	11	—	—	—	—	4	2	—	—	6	2	1	—	22
ST. LUKE'S	—	—	3	29	66	6	6	3	11	—	—	—	44	—	—	—	—	9	4	2	1	16	13	10	—	207
ST. MARK'S	—	—	1	40	95	17	7	1	3	—	—	—	77	1	—	—	—	31	12	2	—	45	6	33	1	327
ST. MICHAEL'S	—	—	1	13	19	15	3	2	5	—	—	—	252	—	—	—	—	13	2	—	—	15	7	19	—	351
WITHINGTON	—	—	1	83	91	8	9	5	12	—	—	—	289	—	—	—	—	10	6	2	—	18	9	21	—	546
WYTHENSHAWE	—	—	4	131	172	9	10	1	3	—	—	—	587	—	—	—	—	34	17	1	1	53	6	25	1	1,002
HOSPITALS AND INSTITUTIONS	—	—	—	—	—	—	—	—	217	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	217

INFECTIOUS DISEASES.

The deaths from the more common diseases are shown in the following figures :—

Years	Measles	Scarlet Fever	Diphtheria	Enteric Fever	Influenza	Whooping Cough	Diarrhœa	Phthisis
1935–44 average	17	1	31	1	127	31	88	597
1945	8	—	14	1	44	25	85	496

Consultations.

9 consultation visits were made during the year by medical officers of the Department at the request of medical practitioners in the City in connection with the diagnosis of cases of infectious disease in which the nature of the illness was in doubt.

SMALLPOX.

No cases of smallpox occurred in the City in 1945.

SCARLET FEVER.

There were 1,140 known cases of scarlet fever in 1945.

There were no deaths and the type of disease continued to be mild compared with that which was prevalent in former years.

64 per cent. of the patients were removed to hospital, and a review of these cases is contained in a statement of the Medical Superintendent of Monsall Hospital.

The following figures show the course of the disease in quarters :—

TABLE 1.

Scarlet Fever—Attacks in Quarters according to Date of Rash.

Year	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
1940	151	116	202	253	722
1941	205	151	196	279	831
1942	238	197	423	910	1,768
1943	590	409	392	601	1,992
1944	359	336	332	512	1,539
5 years Mean ..	308	242	309	511	1,370
1945	322	243	244	331	1,140

TABLE 2.

1945—Scarlet Fever Attacks in Wards, with Attack Rate, Case Fatality per cent., and Removals to Hospital per cent.

Wards	Attacks	Attack Rate per 1,000 Living	Case Fatality per cent.	Removals to Hospital per cent.
City	**1,140**	**1·83**	—	**64·04**
All Saints	19	1·63	—	89·47
Ardwick	27	1·66	—	88·89
Beswick	19	0·97	—	84·21
Blackley	58	2·27	—	74·14
Bradford	29	1·26	—	41·38
Cheetham..	56	2·80	—	66·07
Chorlton-cum-Hardy ..	64	1·69	—	65·62
Collegiate Church	11	1·49	—	100·00
Collyhurst	15	1·34	—	86·67
Crumpsall	55	2·49	—	43·64
Didsbury	51	1·82	—	49·00
Exchange	—	—	—	—
Gorton North	24	1·21	—	62·50
Gorton South	47	1·97	—	82·98
Harpurhey	40	2·39	—	77·50
Levenshulme	27	1·51	—	55·56
Longsight	30	1·30	—	70·00
Medlock Street	15	1·07	—	80·00
Miles Platting	39	2·95	—	79·49
Moston	66	2·49	—	57·58
Moss Side East	17	1·12	—	76·47
Moss Side West	13	0·74	—	46·15
New Cross	26	2·26	—	80·77
Newton Heath	29	1·54	—	48·28
Openshaw	19	1·14	—	78·95
Oxford	—	—	—	—
Rusholme..	30	1·65	—	43·33
St. Ann's	—	—	—	—
St. Clement's	1	1·46	—	100·00
St. George's	15	1·02	—	73·33
St. John's	2	1·44	—	50·00
St. Luke's	29	1·59	—	72·41
St. Mark's	40	2·29	—	70·00
St. Michael's	13	1·24	—	69·23
Withington	83	1·86	—	53·01
Wythenshawe	131	3·26	—	51·14

TABLE 3.

Scarlet Fever—Number of Attacks, Deaths, and Case Mortality Rate per cent. at different Ages for the fifty-four years, 1891—1944, and for 1945.

Ages	1891–1944			1945		
	Attacks	Deaths	Case Fatality per cent.	Attacks	Deaths	Case Fatality per cent.
Under 1 year	924	133	14·39	2	—	—
1 to 2 years	3,078	318	10·33	31	—	—
2 to 3 ,, ...	7,048	513	7·28	61	—	—
3 to 4 ,, ...	10,023	555	5·54	98	—	—
4 to 5 ,, ...	11,815	482	4·08	108	—	—
5 to 6 ,, ...	13,611	310	2·28	131	—	—
6 to 7 ,, ...	12,223	211	1·73	113	—	—
7 to 8 ,, ...	10,720	143	1·33	91	—	—
8 to 9 ,, ...	9,876	98	0·99	65	—	—
9 to 10 ,, ...	7,419	84	1·13	86	—	—
10 to 15 ,, ...	22,047	182	·83	239	—	—
15 to 20 ,, ...	6,792	75	1·10	55	—	—
20 to 25 ,, ...	3,256	43	1·32	21	—	—
25 to 35 ,, ...	3,273	56	1·71	21	. .	. .
35 to 45 ,, ...	1,102	21	1·90	13	—	—
45 and over	346	8	2·31	5	—	—
All ages	123,553	3,232	2·62	1,140	—	—

Table 4.

Scarlet Fever Mortality, 1945—Rate per 1,000 Living compared with Mean of Five Years.

	1940	1941	1942	1943	1944	Mean	1945
England and Wales	0·00	0·00	0·01	0·00	0·00	**0·00**	0·00
126 Great Towns	0·00	0·00	0·01	0·00	0·00	**0·00**	0·00
London	0·00	0·00	0·01	0·00	0·00	**0·00**	0·00
Manchester City	0·00	0·01	0·00	0·00	0·00	**0·00**	0·00
148 Smaller Towns	0·00	0·01	0·01	0·00	0·00	**0·00**	0·00

Scarlet Fever, 1945—Attacks in Weeks, according to Date of Rash.

First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
Week of Year	1945	Week of Year	1945	Week of Year	1945	Week of Year	1945
1	24	14	17	27	26	40	26
2	23	15	25	28	14	41	37
3	27	16	21	29	24	42	41
4	21	17	28	30	31	43	31
5	18	18	18	31	20	44	28
6	23	19	12	32	4	45	29
7	20	20	16	33	11	46	23
8	20	21	12	34	17	47	22
9	30	22	14	35	13	48	24
10	21	23	21	36	18	49	26
11	27	24	20	37	23	50	14
12	29	25	18	38	19	51	18
13	39	26	21	39	24	52	12
Total ..	322	Total ..	243	Total ..	244	Total ..	331

City Total, 1945—1,140.

Scarlet Fever " Return " Cases, 1945.

Out of 799 discharges from Monsall Hospital, 8 gave rise to at least 8 " return " cases, a " return " case rate per cent. of 1·0 as compared with 2·1 in 1944.

The following table shows the interval between return home of hospital patients and onset of illness in " return " cases.

Days	0–6	7–13	14–20	21–27
No. of Cases	5	—	3	—

DIPHTHERIA.

The following figures show the number of cases notified and accepted as diphtheria each year for the last ten years :—

1936	1937	1938	1939	1940	1941	1942	1943	1944	1945
1,202	1,397	1,193	799	716	770	589	791	266	302

Mortality.

The case mortality rate in 1945 was 4·63 per cent. compared with an average of 4·38 in the previous five years. The death rate per 1,000 of the population in Manchester was 0·02 compared with 0·02 in the country as a whole.

There has been a striking reduction in the case mortality rate in recent years. Reference to the following table shows that although the rate continues to be highest in children under 5 years, it is in this group that the greatest percentage reduction has been attained.

TABLE 1.

Diphtheria.—Manchester Case Mortality Rates per cent. in Age Groups.

	0–5 years	5–10 years	10–15 years	15 years and over
1901–10	33·5	17·8	6·0	4·5
1936–45	7·4	6·7	2·0	1·6
Percentage Reduction	77·9	62·4	66·7	64·4

The mortality from diphtheria, apart from artificial active immunisation, can be combated only by prompt and intensive treatment with antitoxin. The difficulty in this regard becomes evident when it is known that in the fatal cases which occurred in 1945 only 7 per cent. received treatment by antitoxin within two days of the onset of the illness. Such delay is disastrous. It is due in part to the hesitancy of the parent in seeking medical advice and in part to the difficulties of early diagnosis which confront the medical attendant.

" Carriers " and the Virulence Test.

Of the total number of formal notifications received it was found on investigation that 19 related to persons who were merely " carriers " of diphtheria-like organisms. In addition, a further 9 " carriers " were discovered who were not notified as suffering from diphtheria.

In many instances it is not possible to isolate the diphtheria bacilli in pure culture, and in such cases a virulence test cannot be carried out.

The following table relates to 18 " carriers " in which a virulence test was made and is of interest in showing the types of " carriers " and the number who were capable of spreading infection.

In the figures here presented clinical cases of diphtheria are excluded, but cases of children with non-membranous rhinitis unaccompanied by constitutional symptoms are included.

Diphtheria " Carriers " and Virulence Tests, 1945.

Type	No. of "Carriers"	No. Virulent	No. Non-virulent	Per cent. Virulent
Nose	10	4	6	40·0
Throat	4	1	3	25·0
Nose and Throat	4	3	1	75·0
Total	18	8	10	44·4

Swabs.

A total of 796 swabs were submitted to the Public Health Laboratory upon request by medical practitioners during the year and, of these, 27 or 3·4 per cent. proved positive. So far as was practicable swabs were taken from the throats and noses of all members under 14 years of age of each family where there had occurred a case of diphtheria.

Supply of Antitoxin.

Diphtheria antitoxin, in phials containing 8,000 units, is supplied free of charge to all medical practitioners for the treatment of persons residing temporarilty or permanently in the City, and it may be obtained from the Public Health Department during office hours or at any time from the following fire stations :—Ash Street, Harpurhey ; New Street, Miles Platting ; Upton Street, Chorlton-upon-Medlock. It may also be obtained at any time from all of the district police stations. The total quantity supplied in this manner in 1945 was 350 phials (2,800,000 units), at a cost of £77 5s. 10d.

TABLE II.

Diphtheria, 1945—Attacks in Weeks, according to date of onset.

First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
Week of Year	1945	Week of Year	1945	Week of Year	1945	Week of Year	1945
1	3	14	3	27	2	40	8
2	5	15	4	28	6	41	8
3	7	16	4	29	2	42	10
4	7	17	10	30	1	43	6
5	3	18	2	31	3	44	9
6	4	19	4	32	5	45	11
7	7	20	1	33	3	46	16
8	7	21	3	34	8	47	12
9	3	22	4	35	5	48	8
10	5	23	6	36	5	49	10
11	6	24	3	37	6	50	7
12	7	25	9	38	6	51	10
13	2	26	4	39	8	52	4
Total ..	66	Total ..	57	Total ..	60	Total ..	119

City Total, 1945—302.

The following table shows that the number of attacks is highest in children up to 10 years.

TABLE III.

Diphtheria.—Number of Attacks, of Deaths, and Case Fatality at Different Ages for the Fifty-Four Years, 1891–1944, and for 1945.

Ages	1891–1944			1945		
	Attacks	Deaths	* Case Fatality per cent.	Attacks	Deaths	* Case Fatality per cent.
Under 1 year	640	316	49·37	1	—	—
1 to 2 years	1,602	637	39·76	3	1	33·33
2 to 3 ,, ...	2,421	651	26·89	9	—	—
3 to 4 ,, ...	3,145	658	20·92	13	1	7·69
4 to 5 ,, ...	3,550	588	16·56	22	1	4·55
5 to 6 ,, ...	3,845	516	13·42	22	1	4·55
6 to 7 ,, ...	3,306	345	10·44	27	2	7·41
7 to 8 ,, ...	2,639	247	9·36	22	1	4·55
8 to 9 ,, ...	2,186	197	9·01	19	1	5·26
9 to 10 ,, ...	1,634	132	8·08	27	5	18·52
10 to 15 ,, ...	5,082	201	3·96	80	1	1·25
15 to 20 ,, ...	2,067	59	2·85	16	—	—
20 to 25 ,, ...	1,209	28	2·32	19	—	—
25 to 35 ,, ...	1,354	28	2·07	17	—	—
35 to 45 ,, ...	559	1	0·18	5	—	—
45 and over	288	26	9·03	—	—	—
All ages	35,527	4,630	13·03	302	14	4·63

* The percentages in this column are the actual proportions of fatal cases to the attacks at those ages.

The case mortality rate at all ages since 1936 has been as follows :—

1936	1937	1938	1939	1940	1941	1942	1943	1944	1945
7·90	6·08	4·19	4·63	6·06	5·84	4·58	3·16	2·26	4·63

TABLE IV.

Diphtheria, 1945.—Attacks in Wards, with Attack Rate, Case Fatality per cent., and Removals to Hospital per cent.

Wards	Attacks	Deaths	Attack Rate per 1,000 Living	Case Fatality per cent.	Removals to Hospital per cent.
City	302	15	0·49	4·63	97·68
All Saints	6	—	0·51	—	100·00
Ardwick	5	—	0·31	—	80·00
Beswick	9	1	0·46	11·11	100·00
Blackley	24	2	0·94	8·33	100·00
Bradford	16	—	0·69	—	93·75
Cheetham	3	—	0·15	—	100·00
Chorlton-cum-H.	7	—	0·19	—	100·00
Collegiate Church	7	—	0·95	—	100·00
Collyhurst	12	1	1·07	8·33	100·00
Crumpsall	7	—	0·32	—	100·00
Didsbury	12	—	0·43	—	83·33
Exchange	—	—	—	—	—
Gorton North . .	6	—	0·30	—	100·00
Gorton South . .	10	—	0·42	—	100·00
Harpurhey	15	2	0·90	13·33	100·00
Levenshulme . .	2	—	0·11	—	100·00
Longsight	5	1	0·22	20·00	100·00
Medlock Street . .	27	2	1·93	7·40	96·39
Miles Platting . .	7	—	0·53	—	100·00
Moston	7	—	0·26	—	100·00
Moss Side East . .	2	—	0·13	—	100·00
Moss Side West . .	5	—	0·29	—	100·00
New Cross	21	1	1·83	4·76	100·00
Newton Heath . .	6	1	0·32	16·66	100·00
Openshaw	10	1	0·60	10·00	90·00
Oxford	—	—	—	—	—
Rusholme	—	—	—	—	—
St. Ann's	—	—	—	—	—
St. Clement's . .	—	—	—	—	—
St. George's . .	16	—	1·09	—	100·00
St. John's	—	—	—	—	—
St. Luke's	6	—	0·33	—	100·00
St. Mark's	17	1	0·97	5·88	94·12
St. Michael's . .	15	2	1·43	13·33	100·00
Withington . .	8	—	0·18	—	100·00
Wythenshawe . .	9	—	0·22	—	100·00

TABLE V.

Diphtheria Mortality, 1945.—Rate per 1,000 Living compared with Mean of Five Years.

	1940	1941	1942	1943	1944	Mean	1945
England and Wales	0·06	0·07	0·05	0·03	0·02	**0·05**	0·02
126 Great Towns	0·07	0·08	0·06	0.04	0·03	**0·06**	0·02
London	0·01	0·03	0·02	0·02	0·01	**0·02**	0·01
Manchester City	0·07	0·07	0·05	0·05	0·01	**0·05**	0·02
148 Smaller Towns	0·05	0·06	0·04	0·04	0·03	**0·04**	0·02

Immunisation against Diphtheria.

During the year 10,220 persons received a complete course of diphtheria prophylactic injections. 603 others received an incomplete course. The numbers were distributed as follows :—

TABLE A.

Number of Persons dealt with in Manchester in 1945.

	Numbers having received complete course of prophylactic treatment	Numbers having received incomplete course of prophylactic treatment
School Clinics	731	112
Child Welfare Centres	6,195	170
Day Nurseries	552	32
Hospitals	375	173
Public Health Office	132	28
Mobile Unit	2,003	84
General Practitioners	232	4
Totals	10,220	603

During 1945, a Mobile Unit visited the areas of the City in which the percentage of immunised children under 5 years of age was low and areas situated at a distance from the Child Welfare Centres and Day Nurseries. This Unit was responsible for the complete immunisation of 2,003 children who would probably not have received treatment if the Public Health Committee had not sanctioned the scheme which brought the service to the homes of the people.

This success was mainly due to a publicity campaign which was launched in conjunction with the Ministry of Health, and which assisted the Health Visitors to make personal contact with parents of non-immunised children.

Alum Precipitated Toxoid in two doses of 0·2 c.c. and 0·5 c.c. with a 4 weeks interval is used for the majority of children under 8 years who have the treatment carried out at the welfare centres and at the public health centre. Children aged 8—15 years receive A.P.T. in two doses of 0·2 c.c. and 0·3 c.c., while persons over 15 years receive 3 injections of T.A.F.

All three prophylactics—T.A.F., T.A.M., and A.P.T.—are in use at the hospitals. T.A.F. and A.P.T. is supplied free to general medical practitioners in the City.

TABLE B.

Prophylactics Used in Immunising Pre-School and School Children.

Age Group	Number having received a full course of injections	Prophylactic Used		
		T.A.F.	A.P.T.	T.A.M.
Under 5 years	8,916	10	8,905	1
5—14 years	1,094	3	1,091	—
Totals—Under 15 years . .	10,010	13	9,996	1

Although Schick testing is not practised as a routine in connection with the greater part of the scheme, 489 primary tests were performed during the year. 142 gave a positive result and 367 were negative. These were carried out largely among hospital patients and staff, as were the 703 posterior tests which gave 46 positive and 657 negative results.

The following table illustrates the progress of the immunisation scheme since its inception :—

DIPHTHERIA IMMUNISATION.

Illustrating the progress of the immunisation scheme since its inception.

Number of Persons, in Age Groups, having had Full Course of Injections.

	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	
Under 1 year	—	20	162	248	212	598	595	691	963	822	1071	915	740	503	1497	1761	2298	1767	2383	Total under 5 years at end of 1945. 27211
1 year ..	3	50	269	313	331	813	743	805	1219	1328	1169	1228	965	912	1882	2411	3557	2927	4379	
2 years ..	5	54	226	197	254	579	613	788	1033	863	890	894	576	409	1295	1292	1567	342	1258	
3 ,, ..	8	44	221	202	206	482	733	668	1146	782	901	824	476	272	1065	1140	1504	168	554	
4 ,, ..	16	33	238	164	210	458	744	664	1333	801	906	856	475	238	1057	920	1710	145	342	
5 ,, ..	9	36	269	152	208	473	921	997	1256	702	951	866	464	192	1226	473	1747	182	264	Total 5–10 years. 32265
6 ,, ..	19	30	281	127	186	406	1015	987	1309	772	972	878	447	222	1241	379	2165	199	233	
7 ,, ..	20	17	291	105	137	365	1002	1076	1242	751	890	832	382	195	1215	236	1577	206	139	
8 ,, ..	10	20	281	82	131	336	876	1415	1150	810	857	711	408	179	1137	176	931	106	101	
9 ,, ..	4	21	230	65	107	282	852	1301	1241	804	678	583	336	162	1036	112	805	98	68	
10 ,, ..	3	7	63	62	98	231	711	1376	1002	923	698	613	308	137	1050	117	864	97	87	Total 10–15 years. 39420
11 ,, ..	5	10	39	46	62	247	486	1061	907	703	459	444	274	86	933	121	595	72	71	
12 ,, ..	2	7	42	29	36	266	345	630	825	772	419	395	218	43	1038	131	465	32	67	
13 ,, ..	2	6	21	22	33	119	280	438	820	615	424	396	259	39	502	100	436	33	50	
14 ,, ..	2	—	4	15	22	48	76	247	191	96	117	79	49	11	219	53	51	12	14	
15 years and over..	—	7	41	39	48	121	67	371	1201	917	444	240	102	105	309	221	298	139	210	Total 15 years & over 63542
Totals 1927-45	108	362	2678	1868	2281	5824	10059	13515	16838	12461	11846	10754	6479	3705	16702	9643	20570	6525	10220	162438

The totals at the end of 1945 indicate approximately the immune population, since no account is taken of any deaths that may have ensued.

TYPHOID AND PARATYPHOID FEVER.

11 notifications were received, the diagnosis being subsequently amended in 2 cases. Thus 9 cases occurred, 7 of which were members of a single family. All the infections were associated with B. typhosus. Investigation did not reveal any probable sources of infection.

30 specimens of blood were submitted to the laboratory by medical practitioners from patients with illness simulating typhoid and none gave positive Widal reactions.

One female "carrier" who has persistently, since 1932, excreted typhoid bacilli remains under observation. No spread from this "carrier" has occurred over the years.

TABLE I.

Number of Notified Cases, Deaths, and Death-rates per 1,000 living from Typhoid and Paratyphoid Fever in each of 10 successive Years.

Year	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945
No. of cases notified and accepted	15	7	6	28	67	59	4	14	4	9
No. of deaths	1	—	—	1	2	*1	2	1	—	—
Death-rate—Manchester	0·00	—	—	0·00	0·00	0·00	0·00	0·00	0·00	0·00
Death-rate—England and Wales. .	0·01	0·00	0·00	0·00	0·00	0·00	0·00	0·00	0·00	0·00

* Death in 1942.

TABLE II.

Typhoid and Paratyphoid Fever. Number of Attacks, of Deaths, and Case Fatality per cent. at Different Ages for the Fifty-five Years, 1891–1945.

Ages	1891–1945		
	Attacks	Deaths	Case Fatality per cent.
Under 1 year	21	9	42·9
1 to 2 years	58	8	13·8
2 to 3 ,, ...	123	17	13·8
3 to 4 ,, ...	175	22	12·6
4 to 5 ,, ...	234	25	10·7
5 to 6 ,, ...	266	28	10·5
6 to 7 ,, ...	267	26	9·7
7 to 8 ,, ...	248	20	8·1
8 to 9 ,, ...	267	22	8·2
9 to 10 ,, ...	261	26	10·0
10 to 15 ,, ...	1,517	163	10·7
15 to 20 ,, ...	1,652	298	18·0
20 to 25 ,, ...	1,601	313	19·6
25 to 35 ,, ...	2,372	541	22·8
35 to 45 ,, ...	1,170	338	28·9
45 and over	815	271	33·3
All ages	11,047	2,127	19·3

TABLE III.

Typhoid and Paratyphoid Fever Attacks in Weeks reported in 1945 According to Date of Onset.

First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
Week of Year	1945	Week of Year	1945	Week of Year	1945	Week of Year	1945
1	7	14	—	27	—	40	—
2	—	15	—	28	—	41	—
3	—	16	—	29	—	42	—
4	—	17	—	30	—	43	—
5	—	18	—	31	—	44	—
6	1	19	—	32	—	45	—
7	—	20	—	33	—	46	—
8	—	21	—	34	1	47	—
9	—	22	—	35	—	48	—
10	—	23	—	36	—	49	—
11	—	24	—	37	—	50	—
12	—	25	—	38	—	51	—
13	—	26	—	39	—	52	—
Total..	8	Total..	—	Total..	1	Total..	—

City total, 1945 = 9.

CEREBRO-SPINAL FEVER.

44 cases of cerebro-spinal fever were notified and accepted as such. The cases were widely spread over the city and no particular focus of infection was evident.

There were 9 deaths from this disease, giving a case mortality rate of 20·5 per cent., which compares with a rate of 25·0 per cent. in 1944.

As regards seasonal prevalence, 13 cases occurred in the first quarter of the year, 16 in the second, 8 in the third, and 7 in the last quarter.

57 patients were admitted to Monsall Hospital, the diagnosis being confirmed in 22 cases. The remainder were treated in other City hospitals.

Cases of Cerebro-Spinal Fever in Age Groups and Sexes, 1945.

Age Groups	No. of Cases Males	No. of Cases Females	Total
0— 5 years	13	8	21
5—10 ,, ...	2	—	2
10—15 ,, ...	3	2	5
15—20 ,, ...	2	2	4
20—25 ,, ...	1	—	1
25—35 ,, ...	1	4	5
35 and over	3	3	6
All ages	25	19	44

POLIOMYELITIS.

Particulars of notified cases of poliomyelitis for 1945 are given in the following table :—

Sex	Age	Ward	Onset	Notified	Paralysis	Result—Jan., 1946.
F	35	Chorlton-cum-H. ..	11th June	25th June	Both thighs	Able to walk with support.
M	5	St. Mark's	10th June	6th July	Right arm	Improving
M	5	Chorlton-cum-H. ..	13th July	1st Aug.	Left arm	Massage treatment
M	1¾	St. George's ..	1st Aug.	22nd Aug.	Right leg	Massage treatment
F	3¼	Ardwick	5th Aug.	19th Sept.	?	Died from meningitis
F	6	Longsight	10th Oct.	16th Oct.	Right arm	Satisfactory progress

ENCEPHALITIS LETHARGICA.

No new cases of acute encephalitis lethargica were notified in 1945.

18 deaths were registered in which chronic encephalitis lethargica was declared to be a contributory cause. For the most part these occurred amongst persons who had not previously been notified as suffering from the disease.

Of the 746 cases notified since 1918, 389, or 52 per cent., are known to have died, and 221, or 29·6 per cent., are totally or partially disabled. The fate of the remainder is uncertain. At the present time 34 male and 31 female patients suffering from chronic encephalitis lethargica are under care in municipal institutions.

BACTERIOLOGICAL EXAMINATIONS MADE FOR THE CITY OF MANCHESTER DURING 1945 BY THE PUBLIC HEALTH LABORATORY, UNIVERSITY OF MANCHESTER.

Month	Diphtheria		Typhoid	Tuberculosis				Water	
				Sputum		Milk		Bacterio-logical	Chemical
	Total	+	Total	Total	+	Total	+	Total	Total
January	267	20	1	106	12	68	7	11	11
February	291	23	6	124	18	95	5	4	4
March	502	33	5	182	18	35	3	18	4
April	354	27	3	111	16	25	—	15	15
May	239	11	2	78	6	26	—	4	4
June	588	43	4	117	13	61	2	24	5
July	338	16	3	103	10	76	6	7	7
August	291	18	4	70	12	57	3	10	4
September	297	22	2	76	13	28	1	13	1
October	437	35	7	105	24	36	2	12	6
November	478	48	2	117	17	223	9	20	10
December	399	27	4	97	8	3	1	4	4
Total	4,481	323	43	1,286	167	733	39	142	75

Total specimens enumerated above, 6,760. Other investigations, 1,883, as under :—

Milks—Coli, etc.	911
,, Chemical examinations	3
,, Reduction test and coli	99
,, Reduction test only	29
,, Heat-treated, reduction test	336
Diphtheria—Virulence tests	83
Swabs—For haemolytic streptococci	93
,, Vincent's angina	26
Haemolytic and group or coagulase test	23
Cerebro-spinal fluid, various tests	17
Cultivation tests	23
Ice cream	59
Blood, Paul Buneell test	3
Malaria	1
Tuberculosis, various specimens examined for	12
Faeces amoeba, blood, etc.	3
Food, etc., for food poisoning	13
Faeces and urine, for typhoid, dysentery, etc.	148
Water, for typhoid	1
	1,883

MEASLES AND GERMAN MEASLES.

Cases notified	1945				
	1st quarter	2nd quarter	3rd quarter	4th quarter	Total
MEASLES—					
By Doctors	3,765	732	126	74	4,697
,, Others	663	196	30	10	899
Total	4,428	928	156	84	5,596
GERMAN MEASLES—					
By Doctors	131	95	50	47	323
,, Others	20	5	5	5	35
Total	151	100	55	52	358

The deaths from measles in successive years are shown in the following table :—

TABLE I.

Deaths from Measles in the City of Manchester during the Ten Years, 1936—1945.

	Under One Year			Years of Age				5 Years and upwards	Total deaths at all ages
Years	Under 3 Months	3–5 Months	6–11 Months	1–	2–	3–	4–		
1936 ..	0	5	32	46	13	7	5	7	114
1937 ..	1	0	8	16	6	4	5	5	44
1938 ..	0	1	12	23	7	5	4	8	60
1939 ..	0	0	0	0	0	0	0	0	0
1940 ..	1	1	8	8	3	0	1	6	28
1941 ..	0	1	7	7	3	2	0	0	20
1942 ..	0	1	3	5	3	1	1	3	17
1943 ..	2	1	0	6	3	0	0	0	12
1944 ..	0	0	2	3	2	1	1	0	9
1945 ..	0	1	2	2	3	0	0	0	8

TABLE 2.

Incidence of Measles in Manchester during the Year 1945, according to Age Groups.

Disease	Under 5 years	5 years and over	Total
Measles	4,291	1,305	5,596

TABLE 3.

Measles—Deaths in Quarters.

Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Whole Year
1901–1910 (mean)	80	122	68	59	329
1911–1920 (mean)	87	125	33	32	277
1921–1930 (mean)	51	62	26	30	159
1931–1940 (mean)	33	8	3	33	67
1941	14	4	1	1	20
1942	0	7	3	7	17
1943	8	2	2	0	12
1944	1	0	0	8	9
1945	5	1	1	1	8

TABLE 4.

Measles Mortality Rates—Rate per 1,000 Living, compared with Mean of Five Years.

	1940	1941	1942	1943	1944	Mean 5 years	1945
England and Wales	0·02	0·03	0·02	0·02	0·01	**0·02**	0·02
126 Great Towns	0·02	0·03	0·03	0·02	0·01	**0·02**	0·02
London	0·01	0·02	0·02	0·02	0·00	**0·01**	0·01
City of Manchester	0·04	0·03	0·05	0·02	0·01	**0·03**	0·01
148 Smaller Towns	0·02	0·03	0·02	0·02	0·01	**0·02**	0·02

WHOOPING COUGH.

Whooping Cough became compulsorily notifiable in October, 1939. Before this date the source of notification was solely from the schools.

Whooping cough notifications during 1945 :—

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
1945	459	446	469	461	1,835

TABLE 1.
Whooping Cough Mortality.—Rate per 1,000 Living, compared with Mean of Five Years.

	1940	1941	1942	1943	1944	Mean 5 years	1945
England and Wales	0·02	0·06	0·03	0·03	0·03	**0·03**	0·02
126 Great Towns	0·02	0·07	0·03	0·04	0·03	**0·04**	0·02
London	0·00	0·04	0·03	0·03	0·04	**0·03**	0·02
City of Manchester	0·01	0·10	0·03	0·05	0·04	**0·05**	0·04
148 Smaller Towns	0·02	0·06	0·02	0·03	0·02	**0·03**	0·01

TABLE 2.
Whooping Cough—Deaths in Quarters.

Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Whole Year
1911–1920 (mean)	59	73	24	17	173
1921–1930 (mean)	48	52	15	15	130
1931–1940 (mean)	16	14	8	6	44
1941	22	27	14	2	65
1942	2	6	2	6	16
1943	4	19	10	9	42
1944	11	5	5	5	26
1945	9	4	2	10	25

TABLE 3.
Incidence of Whooping Cough (known cases) in Manchester during the Year 1945 according to Age Groups.

Disease	Under 5 years	5 years and over	Total
Whooping Cough	1,461	374	1,835

A Comparison of Mortality from Scarlet Fever, Diphtheria, Measles, and Whooping Cough.

Year	Whooping Cough		Measles		Scarlet Fever		Diphtheria	
	Known Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
1936	1,457	52	8,807	114	2,463	6	1,649	91
1937	1,403	54	6,550	44	2,656	7	1,883	89
1938	1,075	13	9,949	60	2,487	8	1,591	55
1939	1,406	30	574	—	1,332	1	1,031	36
1940	670	7	14,804	28	768	1	917	47
1941	4,715	65	3,869	20	885	2	1,009	46
1942	1,103	16	10,468	17	1,869	1	814	27
1943	3,277	42	4,419	12	1,992	1	791	30
1944	2,003	26	6,736	9	1,539	—	266	6
1945	1,835	25	5,596	8	1,140	—	302	14
Total ..	18,944 *	330	71,772	312	17,131	27	10,253	441
Manchester— Case fatality rate per cent.	1·7		0·4		0·2		4·3	

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* This figure represents the estimated number of cases only (18,944) which have occurred during the last 10 years. The actual number of cases is not known since this disease was not notifiable by medical practitioners until October, 1939.

MALARIA.

5 notifications were received, 4 of which related to Service men infected abroad.

The other case was that of a boy aged 3 years, who had stayed with relatives in Surrey from April 22nd to August 15th, when he returned to his home in Manchester. Between August 15th and August 23rd, whilst in hospital, he suffered from several attacks of shivering and fever. Benign tertian malaria was suspected and this diagnosis was confirmed by discovery in his blood of P. vivax.

During his stay in Surrey a history was obtained of insect bites on many occasions and it seems clear that he contracted the infection whilst he was there.

ANTHRAX.

No case of anthrax came to the notice of the Department.

DYSENTERY.

516 notifications of dysentery were received, of which 413 were accepted as relating to true cases. 4 deaths occurred.

Of the 413 cases, 226 proved to be associated with the presence of bacilli of the Sonne type, 147 with other specific organisms, and the remainder were diagnosed on clinical grounds alone.

TUBERCULOSIS.

By Dr. D. P. Sutherland, Senior Tuberculosis Officer.

General.

During the year 1945 there has been a significant increase in the number of new cases of pulmonary tuberculosis ; the non-pulmonary cases are diminished in number. The fatal cases were slightly more than in the preceding year, and both the pulmonary and non-pulmonary forms of the disease have contributed to this increase. These findings are not unexpected and are the more disquieting in view of the very serious diminution in sanatorium provision that has occurred and is continuing. The normal provision of bed accommodation has been reduced by 238, with a consequent great increase in the waiting list. The result is that patients requiring early institutional care have, in many cases, to wait months before this can be provided ; during this time there is a real danger of the disease progressing and the ultimate period of treatment being necessarily lengthened. This again reduces the number of available beds and the vicious circle results in an increase in the advanced cases and a spread of the disease by reason of the impossibility of adequate isolation. The bed shortage is entirely due to the continuing shortage of both nursing and domestic staff which all efforts, both central and local, have so far failed to rectify.

Notification.

Pulmonary Tuberculosis.

The number of new cases totalled 551 males and 431 females, as compared with 520 males and 402 females in 1944. The increase occurred chiefly in the age groups 20–44 in men, and ages 20–24 in women, with a smaller increase at ages 45–54. There was also a slight increase in the number of cases amongst children at age groups 10–14 in boys and 0–9 in girls.

Non-Pulmonary Tuberculosis.

In this group there is a general decrease in the total number of new cases amongst both men and women, the figures being 108 in 1945, as against 110 in 1944 for males, and 116 as against 125 for females.

Mortality.

Pulmonary Tuberculosis.

The reduction in deaths in 1944 has not continued, the figure of 496 deaths being made of up 293 males and 203 females, *i.e.*, the male deaths are increased by 18 and the female deaths diminished by 13.

Non-Pulmonary Tuberculosis.

The deaths in this group total 81, an increase of 13 over the 1944 figure. Both male and female deaths are up, the former by 11 and the latter by 2.

Post Graduate Course.

In April, 1945, the Joint Tuberculosis Council and the National Association for the Prevention of Tuberculosis arranged a special refresher course on Tuberculosis for Tuberculosis Officers and Medical Practitioners. Lectures on all phases of the work were given in the Medical School of the University and visits were arranged to Baguley Sanatorium and Barrowmore Hall Tuberculosis

Colony. The meetings were very well attended and made a valuable contribution to medical teaching. A similar course was held later for social workers, health visitors, and almoners and this provided opportunity for bringing up-to-date knowledge and practice to the notice of the nurses and care workers concerned.

Maintenance Allowances under Memorandum 266/T.

During this year 715 patients have been eligible for allowances and the total disbursement amounted to £22,160. The increase in numbers is due to the fact that the carry over from 1944 is greater than that for 1943, when the scheme only functioned for six months.

The treatment of pulmonary tuberculosis is often prolonged and may involve considerable hardship for both patient and the remainder of the family. The allowances under 266/T have helped to relieve the financial burden, and this is generally reflected in a greater willingness to stay in sanatorium until the maximum amount of benefit is obtained from this form of treatment. The average weekly grant amounted to £1 7s. 6d., but it is felt that in this disease, where a good standard of living is stressed as being of prime importance in overcoming and preventing infection, a higher rate of benefit should be introduced. The chronic cases who are unlikely to return to work do not qualify for assistance and the refusal of their application for allowances is often taken as an indication of the hopelessness of their condition. From a public health standpoint it would be much wiser to extend the scheme to them and a closer control of infective sources would ensue. It will be recollected that the memorandum was introduced as a war measure and was primarily intended to aid the man-power problem in this country.

The calls on the Care Committee's fund amount to £1,000 per annum and it still serves a very useful purpose in meeting demands which are not covered by any other source.

Attendances at the Clinic.

The total number of attendances at the clinic was 30,657, an increase of 1,381 over the figures for 1944.

Examinations carried out for Medical Board Purposes.

The continuing recruitment for the Forces, though diminished in volume, still adds materially to the work of the medical staff. The following table shows the extent to which the Ministry of Labour has used the facilities at the Clinic for obtaining expert opinion on the suitability of those called up in connection with service in His Majesty's Forces.

(1) Year	(2) Number reported upon	(3) Without a previous record at Tuberculosis Clinic	(4) X-ray Examinations of (3)	(5) Total X-ray Examinations	(6) Diagnosis	
					Pulmonary Tuberculosis	Non-Pulmonary Tuberculosis
1939	11	5	5	5	—	—
1940	340	212	182	188	7	—
1941	444	243	236	337	10	1
1942	406	244	240	349	4	—
1943	419	273	272	384	5	1
1944	323	221	219	288	3	—
1945	271	201	200	255	3	1
Totals	2,214	1,399	1,354	1,806	32	3

Mass Miniature Radiography Scheme.

In the absence of a fixed centre for its operation the X-ray Unit has been used as a transportable apparatus. It has been fully employed since February 1945, both in Manchester and, by mutual arrangement, in the Salford area, at various works and offices where the necessary accommodation was available. The co-operation of managements and employees has been readily secured, and there is reason to believe that the scheme has met with their fullest approval. Requests have been received for the examinations to be repeated at future dates. The acute and growing need for a fixed Centre for the Unit is indicated by the fact that several of the smaller groups of volunteers have already been on the waiting list for nearly two years, and the extension of the scheme to members of the general public cannot be considered until such a Centre is available.

It has not been found possible to proceed with the erection of the prefabricated building referred to in the report for 1944 and negotiations have been re-opened in regard to the building in the hospital zone of the City mentioned in the report for that year.

A summary of the findings at the examinations conducted during the present year is submitted. The results are similar to those of other areas where statistics have been published.

	Males	Females	Total
Total radiographed	9,624	7,708	17,332
Total "passed" on miniature film ..	8,895	7,324	16,219=93·58 per cent.
Total "recalled" for full-size film following "abnormal" miniature ..	729	384	1,113= 6·42 per cent.
Total recalled for medical interview ..	426	224	650= 3·74 per cent.

Mass Miniature Radiography—1945.

Ministry of Health Classification Number	Title	Classified on miniature (35 m.m.) film (No further action)			Recalls for full-size film						Totals
					Not followed by recall for clinical examination and interview (No further action)			Followed by recall for clinical examination and interview (analysis appended)			
		Males	Females	Total	Males	Females	Total	Males	Females	Total	
1	Congenital abnormalities of bony thorax and lungs	1	3	4	8	7	15	6	2	8	27
2	Chronic bronchitis and emphysema	—	—	—	1	—	1	18	1	19	20
3	Pneumonia, lobar	—	—	—	—	—	—	1	—	1	1
4	Broncho-pneumonia (non-tuberculous) (including primary atypical)	—	—	—	—	—	—	—	—	—	—
5	Consolidation of unknown origin	—	—	—	—	—	—	3	2	5	5
6	Bronchiectasis	—	—	—	—	—	—	16	3	19	19
7	Pulmonary fibrosis (non-tuberculous, *e.g.*, post-pneumonic)	—	—	—	—	1	1	6	3	9	10
8	Pneumokoniosis (Silicosis, asbestosis, coalminer's pneumokoniosis)	—	—	—	—	—	—	3	—	3	3
9	Pneumokoniosis accompanied by Tuberculosis	—	—	—	—	—	—	—	—	—	—
10	Basal fibrosis (*e.g.*, obliterated costo-phrenic angle and diaphragmatic tenting	5	3	8	4	1	5	2	—	2	15
11	Pleural thickening	41	12	53	24	5	29	22	3	25	107
12	Pleural and interlobar effusion (non-tuberculous)	—	—	—	—	—	—	—	—	—	—
13	Spontaneous pneumothorax (non-tuberculous)	—	—	—	—	—	—	—	—	—	—
14	Intrathoracic new growth (Mediastinal, pulmonary, bronchial, and pleural, primary and secondary, both benign and malignant)	—	—	—	—	—	—	17	6	23	23
15	Cardio-vascular lesions—congenital	—	—	—	—	—	—	1	—	1	1
16	Cardio-vascular lesions—acquired	—	—	—	4	3	7	61	44	105	112
17	Miscellaneous (including acquired conditions of ribs, abnormalities of the diaphragm, dextrocardia, dextrocardia with transposition of viscera, pulmonary mycosis, mediastinal effusions)	—	—	—	4	4	8	11	3	14	22
18	Missing repeat 35 m.m. film (Failed to attend)	6	5	11	—	—	—	—	—	—	11
19	Missing full-size film, following " abnormal " miniature (Failed to attend)	—	—	—	20	15	35	—	—	—	35
20	Tuberculosis, active primary lesions, including epi-tuberculosis :—										
	(*a*) With symptoms	—	—	—	—	—	—	—	—	—	—
	(*b*) Without symptoms	—	—	—	—	—	—	—	—	—	—
21	Tuberculosis—inactive primary lesions (*e.g.*, Ghon's focus and/or calcified gland	10	18	28	24	14	38	3	—	3	69
22	Tuberculosis—active, post-primary—unilateral :—										
	(*a*) With symptoms .. { Previously known cases	—	—	—	1	—	1	6	—	6	7
	(*a*) With symptoms .. { Newly discovered cases	—	—	—	—	—	—	22	7	29	29
	(*b*) Without symptoms { Previously known cases	—	—	—	—	—	—	—	—	—	—
	(*b*) Without symptoms { Newly discovered cases	—	—	—	—	—	—	1	3	4	4
23	Tuberculosis—active, post-primary—bilateral :—										
	(*a*) With symptoms .. { Previously known cases	—	—	—	—	—	—	8	—	8	8
	(*a*) With symptoms .. { Newly discovered cases	—	—	—	—	—	—	11	11	22	22
	(*b*) Without symptoms { Previously known cases	—	—	—	—	—	—	—	—	—	—
	(*b*) Without symptoms { Newly discovered cases	—	—	—	—	—	—	3	3	6	6
24	Tuberculosis—inactive, post-primary :—										
	(*a*) Previously known cases	—	—	—	2	—	2	16	6	22	24
	(*b*) Newly discovered cases	—	—	—	69	24	93	144	64	208	301
—	Tuberculosis—doubtfully active—still under observation	—	—	—	—	—	—	12	9	21	21
25	Tuberculosis—pleural effusion	—	—	—	—	—	—	—	—	—	—
26	Tuberculosis—spontaneous pneumothorax and hydropneumothorax	—	—	—	—	—	—	—	—	—	—
30	Abscess of lung	—	—	—	—	—	—	—	—	—	—
—	Passed as " Normal "	8,832	7,283	16,115	142	86	228	19	49	68	16,411
—	Failed to attend for clinical examination and interview	—	—	—	—	—	—	14	5	19	19
	Totals	8,895	7,324	16,219	303	160	463	426	224	650	17,332

An analysis of the 329 cases of pulmonary tuberculosis recalled for clinical examination and interview by the Radiography Unit Medical Officer shows that :—

(*a*) In 75 instances the disease was regarded as being active. Of these, 14 were previously known cases. The remaining 61 were newly discovered cases of whom 60 were advised to attend their private medical practitioners with a view to securing their reference to the individual residential area Tuberculosis Officer. With the consent of the person concerned a special letter was sent, in every instance, to the practitioner giving particulars of the clinical and radiological findings and asking that the case be referred. Only one of the 61 was unwilling to furnish the name and address of her medical practitioner and, in consequence, no further action could be taken. Of the 60 so advised, 37 attended at Tuberculosis Clinics—28 being recommended for institutional treatment, 19 were admitted to sanatorium, but nine declined admission and were, therefore, placed under supervision at the Clinics—9 were not considered to require institutional care and they were advised to keep under supervision at the Clinics. The remaining 23 failed to avail themselves of the advice in regard to attendance at the Tuberculosis Clinics.

In every such instance an attempt is made to secure the individual's compliance by means of a subsequent special communication from the Tuberculosis Officer to the medical practitioner reminding him of the case and offering, if the practitioner so wishes, directly to get in touch with the person concerned. Any further action depends upon the reply received, as any attempt at coercing the public would be resented and would be contrary to the voluntary basis upon which the Mass Miniature Radiography scheme is established.

Sputum was positive for tubercle bacilli in 12 instances. 11 in the group were admitted to sanatorium and 1 in the group declined admission.

(*b*) In 233 instances the disease was regarded as being inactive, 22 being previously known cases. 91 were regarded as being inactive after the initial clinical examination by the Unit Medical Officer, 123 following further observation at the Tuberculosis Clinics, and 2, following observation in sanatorium. The remaining 17 failed to avail themselves of the advice given relative to their attendance for observation. The method adopted to secure this attendance is precisely the same as that outlined in (*a*) above.

(*c*) In 21 instances the activity of the disease was regarded as being doubtful and attendance at the Tuberculosis Clinics for observation was advised in the manner previously mentioned. In all such instances decisions will be notified to the Radiography Unit by the Tuberculosis Officers as, and when, they are made.

In the cases of other various diseases and abnormalities where, after the initial clinical examination by the Unit Medical Officer, treatment was considered to be indicated, the individual was advised to consult his private medical practitioner, to whom was sent, with the patient's consent, a full report on the clinical and radiological findings.

TABLE 1.

Comparative Figures.

Rates per Thousand of the Population.

	1941	1942	1943	1944	1945
Death Rates :—					
General	16·64	14·72	15·50	14·20	14·41
All respiratory diseases (except tuberculosis) ..	2·81	2·13	2·64	2·04	2·33
Tuberculosis (all forms)	1·32	1·12	1·07	0·91	0·93
Phthisis, both sexes	1·39	0·99	0·91	0·80	0·80
,, males only	1·45	1·23	1·14	0·95	1·00
,, females only	0·84	0·76	0·71	0·66	0·62
Non-pulmonary tuberculosis, both sexes	0·19	0·13	0·16	0·11	0·13
Tuberculosis Notification Rates :—					
All forms	2·17	1·99	2·08	1·88	1·93
Pulmonary only	1·72	1·57	1·60	1·50	1·57
Non-pulmonary only	0·45	0·42	0·48	0·38	0·36

TABLE 2.

New Cases and Deaths during 1945.

Age Periods	New Cases				Deaths			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M.	F.	M.	F.	M.	F.	M.	F.
0	1	2	4	2	1	2	2	2
1	12	8	24	7	1	1	15	7
5	16	21	30	39	1	6	6	8
15	318	339	41	58	110	147	16	12
45	172	55	9	7	140	37	7	1
65 and upwards ..	32	6	—	3	40	10	2	3
Totals ..	551	431	108	116	293	203	48	33

The number of non-notified deaths from pulmonary tuberculosis was 21=4·23 per cent.

The number of non-notified deaths from non-pulmonary tuberculosis was 11=13·58 per cent., but it is to be noted that 4 of the 11 cases were certified as cases of tubercular meningitis. These cases as a rule have a very short illness, and diagnosis is frequently in doubt during life.

The percentage of non-notified deaths from all forms of tuberculosis was 5·36.

There were, in addition, 3 deaths of non-notified cases outside Manchester which were adjudged by the Registrar-General to be properly referable to this area.

TABLE 3.

Primary Notifications and Deaths from Pulmonary Tuberculosis, 1917-1945.

(Manchester figures—52 weeks)
Age Groups.

Pulmonary Tuberculosis	0–	1–	5–	10–	15–	20–	25–	35–	45–	55–	65–	TOTAL	
												Notifications	Deaths
Notifications, 1917—1935	77	531	1391	1443	2852	3246	5413	5047	4250	2154	728	27132	
Deaths, ,, ,,	63	207	149	301	1522	1971	3250	3539	3574	1916	696		17188
Notifications, 1936	1	6	17	34	104	167	202	174	132	106	32	975	
Deaths, ,, ...	1	3	5	12	59	84	129	130	120	100	28		671
Notifications, 1937	2	12	28	21	130	149	219	180	150	117	47	1055	
Deaths, ,, ...	1	6	2	2	58	77	126	128	114	100	50		664
Notifications, 1938	6	8	27	30	116	146	192	152	134	104	32	947	
Deaths, ,, ...	1	3	2	7	46	78	128	95	126	104	30		620
Notifications, 1939	3	8	19	22	125	132	174	169	116	101	41	910	
Deaths, ,, ...	1	2	—	4	53	73	131	98	100	101	35		598
Notifications, 1940	5	5	14	21	145	136	216	171	156	98	45	1012	
Deaths	2	2	1	5	64	56	144	149	118	91	53		685
Notifications, 1941	3	15	10	30	148	136	206	163	164	116	45	1036	
Deaths, ,, ...	—	5	4	4	63	67	125	117	121	131	65		702
Notifications, 1942	1	5	17	18	130	150	202	173	109	109	32	946	
Deaths, ,, ...	—	1	6	3	41	68	119	111	104	101	42		596
Notifications, 1943	1	11	10	21	129	157	208	169	115	102	34	957	
Deaths, ,, ...	1	1	—	4	41	57	92	106	108	102	35		547
Notifications, 1944	2	18	18	27	117	139	191	140	123	102	45	922	
Deaths, ,, ...	—	3	2	2	34	59	95	89	99	77	35		495
Notifications, 1945	3	20	10	27	119	174	206	158	133	94	38	982	
Deaths ,, ...	3	2	2	6	31	60	96	68	95	81	51		495
Total notifications	104	639	1561	1694	4115	4732	7429	6696	5582	3203	1119	36874	
Total deaths	73	235	173	350	2012	2650	4435	4631	4679	2904	1120		23262

TABLE 4.

Primary Notifications and Deaths from Non-Pulmonary Tuberculosis, 1917-1945.

(Manchester figures—52 weeks)

Age Groups.

Non-pulmonary Tuberculosis	0–	1–	5–	10–	15–	20–	25–	35–	45–	55–	65–	Total	
												Notifications	Deaths
Notifications, 1917—1935	267	1786	2066	1615	1248	738	833	501	360	215	127	9756	
Deaths, ,, ,,	326	1019	428	358	377	238	274	221	186	125	90		3642
Notifications, 1936	4	50	57	49	38	33	29	13	14	11	3	301	
Deaths ,, ...	7	21	15	9	14	12	8	4	10	7	2		109
Notifications, 1937	9	53	67	43	66	36	45	26	8	14	9	376	
Deaths, ,, ...	5	23	10	10	12	11	13	9	6	13	7		119
Notifications, 1938	10	41	51	47	42	27	39	18	15	6	7	303	
Deaths, ,, ...	8	17	13	10	8	7	12	7	12	4	7		105
Notifications, 1939	4	46	40	34	46	29	36	23	15	10	6	289	
Deaths, ,, ...	3	24	9	7	14	12	9	6	5	8	6		103
Notifications, 1940	3	29	47	30	42	27	31	18	17	10	6	260	
Deaths, ,, ...	4	17	9	2	10	7	9	5	10	4	6		83
Notifications, 1941	3	47	40	34	40	24	45	21	11	2	6	273	
Deaths, ,, ...	3	35	9	8	14	9	13	10	8	7	3		119
Notifications, 1942	2	36	35	27	42	29	33	24	16	8	3	255	
Deaths, ,, ...	4	14	5	7	9	10	10	3	1	6	6		75
Notifications, 1943	4	36	36	34	44	36	51	18	18	8	7	292	
Deaths, ,, ...	3	22	2	12	12	5	12	7	6	6	1		88
Notifications, 1944	3	34	32	15	32	36	34	25	9	12	3	235	
Deaths, ,, ...	4	13	7	5	7	5	3	6	8	4	2		64
Notifications, 1945, ...	6	31	36	33	29	20	30	20	11	5	3	224	
Deaths, ,, ...	4	22	6	8	5	6	7	8	5	3	5		79
Total notifications	315	2189	2507	1961	1669	1035	1206	707	494	301	180	12564	
Total deaths	371	1227	513	436	482	322	370	286	257	187	135		4586

Table 5.

Primary Notifications of Pulmonary and Non-Pulmonary Tuberculosis received from Municipal Wards during 1945.

Wards	Pulmonary	Non-Pulmonary	Totals
1. Exchange	1	—	1
2. New Cross	20	1	21
3. St. Clement's	—	—	—
4. Oxford	7	—	7
5. St. John's	2	—	2
6. St. Ann's	—	—	—
7. St. Michael's	12	6	18
8. Collyhurst	22	5	27
9. Cheetham	30	8	38
10. Collegiate Church	18	3	21
11. Crumpsall	26	5	31
12. Blackley	39	6	45
13. Harpurhey	23	2	25
14. Moston	23	9	32
15. Newton Heath	28	8	36
16. Miles Platting	18	6	24
17. Bradford	49	5	54
18. Beswick	33	8	41
19. Ardwick	30	7	37
20. Openshaw	26	2	28
21. St. Mark's	34	4	38
22. Longsight	36	5	41
23. All Saints'	41	11	52
24. St. Luke's	60	12	72
25. Medlock Street	24	5	29
26. St. George's	22	6	28
27. Moss Side East	23	8	31
28. Moss Side West	31	7	38
29. Chorlton-cum-Hardy	43	15	58
30. Didsbury	33	6	39
31. Withington	62	12	74
32. Gorton North	28	2	30
33. Gorton South	30	12	42
34. Levenshulme	23	8	31
35. Rusholme	31	10	41
36. Wythenshawe	50	20	70
37. Unclassified	4	—	4
Total—City of Manchester	982	224	1,206

TABLE 6.

Sources of Notification of Tuberculosis during 1945.

Source	Pulmonary	Non-Pulmonary	Totals
Crumpsall Hospital	54	6	60
Withington Hospital	47	7	54
Booth Hall Hospital	28	35	63
District Medical Officers	—	—	—
Manchester Royal Infirmary	28	61	89
Ancoats Hospital	24	8	32
Skin Hospital	—	7	7
St. Mary's Hospital	3	2	5
Northern Hospital	3	2	5
Jewish Hospital	9	2	11
Pendlebury Hospital	—	7	7
Babies' Hospital	4	2	6
Hulme Dispensary	—	—	—
Gartside Street Dispensary	1	6	7
Hardman Street Dispensary	6	—	6
Asylums	12	—	12
Schools	—	—	—
Tuberculosis Staff	108	14	122
Naval, Military, and Air	121	8	129
Other Authorities	63	20	83
Various Sources	5	3	8
Private Practitioners	458	27	485
Child Welfare Centres	—	—	—
Swinton House	—	—	—
Ear Hospital	—	—	—
Eye Hospital	—	—	—
Monsall Hospital	3	6	9
Ministry of Pensions	5	1	6
Total	982	224	1,206

118 tenants have allowed the removal of bedding, etc., for disinfection or destruction.

49,824 cardboard boxes have been prepared in the office and supplied to patients for use as sputum boxes in the home.

365 sputum bottles have been supplied for use outside the house.

9,536 visits have been made by the Enquiry Officers during the year.

36,902 letters were sent out.

96 notices warning against spitting on floors, etc., have been supplied to offices and workshops.

TABLE 7.

Sources of Primary Notification of Non-Pulmonary Cases for the Years 1918 to 1945.

Source	1918–1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945
Crumpsall Hospital	346	16	41	20	19	24	14	17	18	9	6
Withington Hospital	322	23	26	32	22	19	14	20	15	10	7
Booth Hall Hospital	829	39	48	42	37	31	48	34	42	37	35
Outside District Medical Officers	8	—	1	1	—	—	—	—	—	—	—
Royal Infirmary	1516	51	58	38	49	44	51	48	75	49	61
Ancoats Hospital	703	17	57	29	33	11	29	24	23	18	8
Skin Hospital	638	11	13	8	20	14	11	7	8	10	7
St. Mary's Hospital	180	6	6	7	3	7	4	2	2	3	2
Northern Hospital	144	12	—	1	4	8	4	4	2	1	2
Jewish Hospital	80	2	1	2	1	3	1	1	2	2	2
Pendlebury Hospital	198	13	17	9	11	6	13	10	10	9	7
Babies' Hospital	25	1	3	2	2	—	2	1	5	3	2
Hulme Dispensary	5	—	—	—	1	—	—	—	—	—	—
Gartside Street Dispensary . .	573	12	8	12	5	9	7	2	8	4	6
Hardman Street Dispensary	226	—	—	—	—	—	—	—	—	—	—
Bowdon Hospital	8	—	—	—	—	—	—	—	—	—	—
Asylums	37	—	—	—	1	1	5	2	4	2	—
Schools	346	3	3	4	2	3	2	2	2	—	—
Tuberculosis Office Staff . .	240	14	24	9	7	18	13	12	16	11	14
Naval, Military, and Air . .	36	1	—	3	1	4	7	8	13	13	8
Various Sources	294	14	14	19	20	24	12	19	14	24	23
Private Practitioners	2183	64	53	61	47	31	30	33	26	24	27
Child Welfare Centres . .	5	—	—	—	—	—	—	1	—	—	—
Ear Hospital	—	1	—	—	—	—	—	—	—	—	—
Eye Hospital	—	1	—	—	—	—	—	—	—	—	—
Swinton House	11	—	—	—	—	—	—	—	—	—	—
Monsall Hospital	—	—	3	4	4	3	6	4	4	3	6
Ministry of Pensions	—	—	—	—	—	—	—	4	3	3	1
	8953	301	376	303	289	260	273	255	292	235	224

TABLE 8.

* Number of New Cases of Pulmonary Tuberculosis Notified during the Years 1900 to 1945.

Year	Poor-law Cases	Institutions, etc.	Private Practitioners	Total
1) 1900	578	455	540	1,573
1901	625	373	341	1,339
1902	667	305	303	1,275
1903	556	550	251	1,357
1904	512	440	250	1,202
1905	527	588	291	1,406
1906	565	510	304	1,379
1907	634	646	310	1,590
(2) 1908	659	498	346	1,503
1909	681	542	384	1,607
1910	543	760	356	1,659
(3) 1911	517	897	423	1,837
(4) 1912	488	947	969	2,404
(5) 1913	345	717	1,350	2,412
1914	483	877	1,304	2,664
1915	279	740	1,194	2,213
1916	322	817	1,410	2,549
1917	470	716	1,061	2,247
1918	268	563	1,015	1,846
1919	208	538	845	1,591
1920	206	629	672	1,507
1921	257	632	722	1,611
1922	233	567	656	1,456
1923	239	546	659	1,444
1924	223	555	731	1,509
1925	262	496	746	1,504
1926	220	422	765	1,407
1927	241	441	756	1,438
1928	253	361	824	1,438
1929	201	382	802	1,385
1930	201	377	709	1,287
	Transferred Hospitals			
1931	206	362	717	1,285
1932	202	228	657	1,087
1933	205	213	663	1,081
1934	242	197	634	1,073
1935	218	202	586	1,006
1936	208	192	575	975
1937	233	275	547	1,055
1938	249	202	496	947
1939	223	227	460	910
1940	241	275	496	1,012
1941	218	324	494	1,036
1942	179	335	432	946
1943	200	381	376	957
1944	138	408	376	922
1945	129	395	458	982
Total	15,554	22,103	29,256	66,913

* This table does not include 425 cases notified in 1899.

(1). Voluntary notification of Pulmonary Tuberculosis—Manchester Scheme.
(2). Compulsory notification (Tuberculosis Regulations) from Poor Law Institutions.
(3). Compulsory notification from voluntary institutions.
(4). Compulsory notification of Pulmonary Tuberculosis by all practitioners.
(5). Compulsory notification of all forms of Tuberculosis.

TABLE 9.

Number of New Cases of Non-Pulmonary Tuberculosis Notified during the Years 1913—1945.

Year	Males	Females	Total
1913	759	714	1,473
1914	519	413	932
1915	422	415	837
1916	418	467	885
1917	433	449	882
1918	345	353	698
1919	206	228	434
1920	280	257	537
1921	295	281	576
1922	321	284	605
1923	350	380	730
1924	316	307	623
1925	322	300	622
1926	239	224	463
1927	277	226	503
1928	214	276	490
1929	204	171	375
1930	251	215	466
1931	259	237	496
1932	201	201	402
1933	154	159	313
1934	170	143	313
1935	146	161	307
1936	154	147	301
1937	184	192	376
1938	154	149	303
1939	143	146	289
1940	129	131	260
1941	135	138	273
1942	118	137	255
1943	127	165	292
1944	110	125	235
1945	108	116	224
Total	8,463	8,307	16,770

TABLE 10.

Tuberculosis (Non-Pulmonary)—Primary Cases Notified during 1945.—Age Groups and Site.

Location of Disease	Age Groups																				Totals	
	0—		5—		10—		15—		20—		25—		35—		45—		55—		65—			
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Brain :—Tumour	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Meninges	11	5	2	2	1	3	2	1	—	—	1	—	—	—	1	—	—	—	—	—	18	11
Hydrocephalus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Glands :—Cervical	3	3	6	9	4	13	3	4	—	4	3	11	3	3	—	1	—	—	—	1	22	49
Mesenteric	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Axillary	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Inguinal	—	—	—	—	1	—	—	—	—	—	—	—	1	1	—	1	—	—	—	—	2	2
Tuberculous Peritonitis	—	—	1	—	—	—	—	1	1	1	—	—	—	1	—	—	—	—	—	—	2	3
Tuberculosis of Abdomen	—	—	—	—	2	1	1	2	3	—	—	—	—	—	—	—	—	—	—	—	6	3
,, of Breast	—	—	—	—	—	—	—	—	—	—	—	1	—	2	—	—	—	—	—	—	—	3
,, of Intestines	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	1	1
Joints :—Spine	8	1	1	1	—	1	3	1	1	1	1	2	—	1	—	1	—	1	—	—	14	10
Hip	2	—	4	2	2	2	1	1	1	3	—	—	—	—	—	1	—	—	—	—	10	9
Elbow	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—
Ankle	2	—	1	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	4	1
Wrist	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1	1	1
Shoulder	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—
Knee	—	—	2	4	—	—	2	1	1	1	—	1	—	2	1	—	1	—	—	—	7	9
Bones :—Various	—	—	1	—	1	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	4	—
Tuberculosis of Skin	—	—	—	—	—	—	1	2	—	—	—	—	—	1	1	—	1	—	—	1	3	4
General Tuberculosis	2	—	—	—	—	1	1	—	—	—	1	—	—	—	—	—	—	—	—	—	4	1
Special Organs :—Ear	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bladder, etc.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Kidney	—	—	—	—	—	—	—	—	—	—	—	2	—	—	1	—	—	—	—	—	1	2
Testicle, etc.	—	—	—	—	—	—	—	—	—	—	2	—	2	—	—	—	—	—	—	—	4	—
Muscles, etc.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rectum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—
Uterus	—	—	—	—	—	—	—	—	—	1	—	3	—	1	—	—	—	—	—	—	—	5
Unclassified	—	—	—	—	1	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	2	1
Totals	28	9	18	18	12	21	15	14	9	11	9	21	8	12	6	5	3	2	—	3	108	116

TABLE 11.—Various Statistics Relating to the Notification of Tuberculosis.

	1945	1944	1943	1942	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932	1914 to 1931	1899 Sept. 1st to 1913 Dec. 31st	Total
Cases Visited and Registered—																*Phthisis* only	
Males	661	632	669	671	793	771	674	716	818	703	738	836	804	828	25014	14170	49498
Females	550	532	599	553	539	541	544	561	630	586	584	598	622	723	19214	8854	36230
Totals	1211	1164	1268	1224	1332	1312	1218	1277	1448	1289	1322	1434	1426	1551	44228	23024	85728
Houses Disinfected—																	
1. By Corporation—																	
(*a*) With solution of chlorinated lime only	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15582	9015	24597
(*b*) With lime solution only ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	126	126
(*c*) By Esmarch's method and solution of chlorinated lime	—	—	—	—	—	—	—	—	—	—	—	—	—	—	12643	17232	29875
(*d*) † By fumigating lamp	982	1223	1321	1395	1582	1837	1983	2107	2180	2361	2608	2866	2952	2991	15812	—	44200
Totals	982	1223	1321	1395	1582	1837	1983	2107	2180	2361	2608	2866	2952	2991	44037	26373	98798
2. By Tenants— Esmarch's method of chlorinated lime, etc.	3584	4834	5275	4374	3571	4170	4283	4473	4583	4864	5108	5614	5791	5802	99245	36919	202490
Totals	4566	6057	6596	5769	5153	6007	6266	6580	6763	7225	7716	8480	8743	8793	143282	63292	301288
Specimens of Sputum examined—																	
Positive	626	569	548	550	615	649	693	649	683	769	846	1002	966	649	8713	6705	25232
Negative	3686	3927	3840	3699	3377	3581	3511	3878	4060	4202	4809	4957	4734	3589	29763	12176	97789
Totals	4312	4496	4388	4249	3992	4230	4204	4527	4743	4971	5655	5959	5700	4238	38476	18881	123021
Cases admitted to Hospital and Sanatoria	1494	1618	2000	2008	2012	2157	2007	2204	2246	2239	2347	2368	2275	2038	37736	22669	89418
Notified from Common Lodging houses	18	14	15	14	17	39	25	37	27	36	24	28	43	44	1878	3109	5368
Number of cases under observation ..	6680	6470	6316	6136	6421	6736	7034	7140	7558	7951	8271	8650	9017	9441	156204	33702 Approx.	—

† Method commenced on 1st December, 1925.

TABLE 12.—Return showing the Work of the Clinic during 1945.

Diagnosis	Pulmonary				Non-Pulmonary				Total				Grand Total
	Adults		Children		Adults		Children		Adults		Children		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
A.—New cases examined during the year (excluding contacts)—													
(*a*) Definitely tuberculous	410	313	13	15	41	61	38	23	451	374	51	38	914
(*b*) Diagnosis not completed	..	..	..	..	..	..	..	..	74	70	19	9	172
(*c*) Non-tuberculous	..	..	..	..	..	..	..	..	978	1111	123	129	2341
B.—Contacts examined during the year—													
(*a*) Definitely tuberculous	9	25	5	4	..	1	..	2	9	26	5	6	46
(*b*) Diagnosis not completed	..	..	..	..	..	..	..	..	5	8	14	11	38
(*c*) Non-tuberculous	..	..	..	..	..	..	..	..	171	427	317	283	1198
C.—Cases written off the Clinic Register as— ..													
(*a*) Recovered	34	60	21	11	9	20	34	34	43	80	55	45	223
(*b*) Non-tuberculous	..	..	..	..	..	..	..	..	1149	1538	440	412	3539
D.—Number of persons on Clinic Register on December 31st—													
(*a*) Definitely tuberculous	2058	1659	193	158	334	470	275	231	2392	2129	468	389	5378
(*b*) Diagnosis not completed	..	..	..	..	..	..	..	..	79	78	33	20	210

Cases of tuberculosis who received Treatment from the Clinic	441
Attendances at the Clinic	30,657

TABLE 13.

Insured Cases Applying for Treatment for the Years 1914-1945.

	Males	Females	Total
1914	730	321	1,051
1915	572	315	887
1916	747	316	1,063
1917	728	359	1,087
1918	642	261	903
1919	630	255	885
1920	645	250	895
1921	615	255	870
1922	543	265	808
1923	539	291	830
1924	597	371	968
1925	610	327	937
1926	562	368	930
1927	555	296	851
1928	612	372	984
1929	610	376	986
1930	551	352	903
1931	555	360	915
1932	451	323	774
1933	503	281	784
1934	471	284	755
1935	428	283	711
1936	483	312	795
1937	507	345	852
1938	466	269	735
1939	413	306	719
1940	493	317	810
1941	521	297	818
1942	475	347	822
1943	482	357	839
1944	426	321	747
1945	489	331	820

Cases of discharged Service personnel referred for treatment—279.

Number of patients who had so far recovered that no signs of active disease were found : Insured—328 ; Uninsured—163.

Grants of food were made in 490 instances to 65 families, and 3 grants of clothing were supplied to 3 patients in hospital and sanatoria to enable them to derive full benefit from treatment.

Special visits to the number of 12,515 have been paid by the Tuberculosis Nurses and 828 visits by the Clinical Nurse who attends to domiciliary patients requiring surgical dressings and nursing care.

TABLE 14.—Insured Cases Treated in 1945.

Residential	1,368
Tuberculosis Clinic	38
Domiciliary	2,002
Total	3,408

Analysis of Cases Treated.

TABLE 15.—*Residential* (*Insured*).

INSTITUTION	Total Cases Treated (1)		Discharged from Institutions		Died	* Residential Treatment discontinued in other cases	Still under Residential Treatment on 1st Jan., 1946
	Males	Females	Improved (2)	Without Improvement (3)	(4)	(5)	(6)
			Pulmonary				
Baguley	383		137	26	47	19	154
		286	103	15	39	9	120
Crossley	64		29	2	3	8	22
		88	33	2	2	5	46
Abergele	92		36	4	2	3	47
		11	9	—	2	—	—
Barrowmore	55	—	16	6	6	6	21
Withington	169		60	11	50	—	48
		81	37	12	13	—	19
Crumpsall	25		8	9	5	—	3
		18	3	7	5	—	3
Manchester Royal Infirmary ..	—		—	—	—	—	—
		—	—	—	—	—	—
Total Pulmonary	788	484	471	94	174	50	483
			Non-Pulmonary				
Barrowmore	—	—	—	—	—	—	—
Manchester Royal Infirmary ..	2		2	—	—	—	—
		9	9	—	—	—	—
Skin Hospital	1		1	—	—	—	—
		3	3	—	—	—	—
Ancoats Hospital	1		1	—	—	—	—
		—	—	—	—	—	—
Shropshire Orthopaedic Hospital	16		6	—	1	—	9
		23	13	1	—	1	8
Withington	17		11	—	4	—	2
		6	4	—	1	—	1
Crumpsall	11		7	2	2	—	—
		7	5	1	—	—	1
Total Non-Pulmonary ..	48	48	62	4	8	1	21
TOTAL—ALL FORMS	836	532	533	98	182	51	504

* The figures in column (5) relate to cases as to the progress of which no definite report is available for various reasons—*e.g.*, the withdrawal from the Institution of the insured persons themselves before the expiration of the period for which they were nominated for the treatment.

TABLE 16.—*Residential* (*Uninsured and Children under* 15).

INSTITUTION	Total Cases Treated			Discharged from Institutions		Died	* Residential Treatment discontinued in other cases	Still under Residential Treatment on 1st Jan., 1946
	Males	Females (1)	Children	Improved (2)	Without Improvement (3)	(4)	(5)	(6)
			PULMONARY					
Baguley	19			9	1	1	—	8
		75	—	21	4	13	8	29
				—	—	—	—	—
Crossley	5			3	—	—	—	2
		15	—	6	1	—	1	7
Abergele	4			—	—	—	—	3
		3		2	1	—	—	—
			143	50	2	3	—	88
Barrowmore	3	—	—	—	—	2	—	1
Withington	67			23	6	31	—	7
		75	—	28	11	21	—	15
Booth Hall	1			—	—	1	—	—
		3		1	—	2	—	—
			31	14	1	6	1	9
Crumpsall	16			—	5	9	—	2
		10	—	—	6	4	—	—
Manchester Royal Infirmary	—	—	—	—	—	—	—	—
Total Pulmonary	115	181	174	157	38	93	11	171
			NON-PULMONARY					
Abergele	—			—	—	—	—	—
		—		—	—	—	—	—
			119	34	5	1	—	79
Manchester Royal Infirmary	2			2	—	—	—	—
		2		2	—	—	—	—
			2	2	—	—	—	—
Skin Hospital	—	—	—	—	—	—	—	—
Ancoats Hospital	—	—	—	—	—	—	—	—
Shropshire Orthopaedic Hospital	3			1	—	—	—	2
		3	—	2	—	—	—	1
Withington	6			4	—	1	—	1
		9	—	4	3	1	—	1
Booth Hall	2			1	—	—	—	1
		—		—	—	—	—	—
			42	15	—	20	—	7
Crumpsall	2			1	—	1	—	—
		9	—	5	2	—	—	2
Total Non-Pulmonary	15	23	163	73	10	24	—	94
Total—All Forms	130	204	337	230	48	117	11	265

* The figures in column (5) relate to cases of which no definite report is available for various reasons—*e.g.*, the withdrawal from the Institution of the persons themselves before the expiration of the period for which they were nominated for the treatment.

Light Therapy.

Artificial light treatment has been continued for those cases that experience has proved benefit by this form of therapy. During the last 16 years 825 cases have been under this treatment. Two forms of artificial sunlight are employed, viz., the mercury vapour lamp, which was in use up to the time we moved into the new clinic, and the open arc lamp.

The following table analyses these cases in detail and shows a gain in weight and improvement in many patients. Quiescence was secured in a number of those who completed the necessary course of treatment. It is to be noted that those particularly benefiting are the sufferers from tuberculous adenitis (with or without abscess formation), and those in whom abdominal tuberculosis existed. It must be borne in mind that no figures of the treatment of lupus appear, as these cases are treated by the Manchester and Salford Hospital for Skin Diseases (on behalf of the Corporation) by light therapy, and in the majority of instances with very marked benefit.

TABLE 17.

Localisation of the Disease	No. of Cases	Sex		Conditions of Cases at the end of Treatment				Weight Record			Average duration of Treatment in Months	Treatment discontinued	Cases still under Treatment and not included in table
		M.	F	Quiescent	Improved	Stationary	Worse	Gain	Stationary	Loss			
Tuberculous adenitis with abscess	150	66	84	64	19	6	—	74	7	8	13·28	61	19
Tuberculous adenitis without softening ..	481	211	270	170	59	16	6	194	25	32	11·20	230	31
Tuberculosis of bones joints, and spine ..	39	25	14	10	3	2	—	12	—	3	10·93	24	2
Tuberculosis of abdomen and tabes mesenterica	62	21	41	18	9	4	—	25	2	4	9·86	31	2
Tuberculosis of bronchial glands	4	4	—	—	2	—	1	3	—	—	7·00	1	—
Tuberculosis of skin ..	9	3	6	—	2	—	—	1	1	—	2·75	7	—
Tuberculosis of kidney ..	5	2	3	—	1	1	—	1	—	1	12·00	3	—
Pre-tuberculous conditions	15	8	7	2	5	—	—	6	—	1	5·14	8	1
Chest wall	5	3	2	1	—	—	—	—	1	—	8·00	4	—

TABLE 18.

Non-pulmonary cases treated at various Institutions :—

Tuberculosis of :—

Bones and Joints	191
Glands	28
Genito Urinary Tract	13
Abdomen	23
Skin—	
1. Lupus Vulgaris	84
2. Toxi Tuberculids	3
3. Bazins Disease	8
4. Tuberculous Ulceration of Skin	10

TABLE 19.

Tables showing After History of Quiescent and Arrested Cases (Insured).

1935.

No Tubercle Bacilli found. *Tubercle Bacilli found.*

Stage	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1945	Lost sight of	Died	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1945	Lost sight of	Died
I.	M	57	21	17	19	M	20	11	4	1
	F	52	31	17	4	F	13	9	3	1
II.	M	39	23	11	5	M	24	12	2	10
	F	22	10	8	4	F	8	5	2	4
III.	M	1	1	—	—	M	4	2	1	1
	F	3	3	—	—	F	3	3	—	—
	M & F	174	89	53	32	M & F	72	42	12	18

1936.

I.	M	53	28	17	8	M	27	16	7	4
	F	51	30	13	8	F	19	13	5	1
II.	M	15	5	4	6	M	29	9	9	11
	F	25	11	10	4	F	11	8	2	1
III.	M	6	3	—	3	M	8	4	1	3
	F	4	—	1	3	F	2	2	—	—
	M & F	154	77	45	32	M & F	96	52	24	20

1937.

I.	M	40	26	9	5	M	20	10	5	5
	F	33	27	3	3	F	8	6	1	1
II.	M	20	3	8	9	M	25	16	3	6
	F	18	11	5	2	F	17	11	5	1
III.	M	2	—	—	2	M	4	1	1	2
	F	2	1	1	—	F	4	2	—	2
	M & F	115	68	26	21	M & F	78	46	15	17

TABLE 19—continued

Tables showing After History of Quiescent and Arrested Cases (Insured)—continued

1938.

	No Tubercle Bacilli found.					*Tubercle Bacilli found.*				
Stage	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1945	Lost sight of	Died	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1945	Lost sight of	Died
I.	M	34	19	11	4	M	9	5	3	1
	F	30	17	9	4	F	12	7	4	1
II.	M	27	14	8	5	M	33	19	6	8
	F	17	13	3	1	F	11	8	1	2
III.	M	3	1	1	1	M	—	—	—	—
	F	1	1	—	—	F	1	1	—	—
	M & F	112	65	32	15	M & F	66	40	14	12

1939.

Stage	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1945	Lost sight of	Died	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1945	Lost sight of	Died
I.	M	19	15	1	3	M	5	4	—	1
	F	15	10	2	3	F	7	6	—	1
II.	M	22	14	2	6	M	26	16	2	8
	F	18	11	3	4	F	10	9	1	—
III.	M	1	1	—	—	M	2	1	—	1
	F	3	1	—	2	F	2	2	—	—
	M & F	78	52	8	18	M & F	52	38	3	11

1940.

Stage	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1945	Lost sight of	Died	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1945	Lost sight of	Died
I.	M	11	8	3	—	M	2	2	—	—
	F	20	18	2	—	F	2	1	1	—
II.	M	14	10	2	2	M	22	19	1	2
	F	5	2	3	—	F	16	13	3	—
III.	M	3	2	—	1	M	—	—	—	—
	F	1	1	—	—	F	4	3	1	—
	M & F	54	41	10	3	M & F	46	38	6	2

TABLE 19—continued

Tables showing After History of Quiescent and Arrested Cases (Insured)—continued

1941.

No Tubercle Bacilli found. *Tubercle Bacilli found.*

Stage	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1945	Lost sight of	Died	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1945	Lost sight of	Died
I.	M	15	12	2	1	M	7	6	—	1
	F	15	12	3	—	F	4	4	—	—
II.	M	17	14	2	1	M	21	14	5	2
	F	13	13	—	—	F	14	13	1	—
III.	M	1	—	—	1	M	2	2	—	—
	F	2	—	1	1	F	2	2	—	—
	M & F	63	51	8	4	M & F	50	41	6	3

1942.

I.	M	26	18	4	4	M	6	5	—	1
	F	24	20	2	2	F	10	9	1	—
II.	M	12	10	2	—	M	19	16	—	3
	F	12	8	1	3	F	8	5	2	1
III.	M	2	2	—	—	M	—	—	—	—
	F	2	2	—	—	F	1	1	—	—
	M & F	78	60	9	9	M & F	44	36	3	5

1943.

I.	M	35	33	2	—	M	9	9	—	—
	F	36	33	2	—	F	6	6	—	—
II.	M	16	14	2	—	M	20	20	—	—
	F	18	17	—	1	F	21	20	—	1
III.	M	2	2	—	—	M	2	—	—	2
	F	2	1	—	1	F	2	2	—	—
	M & F	108	100	6	2	M & F	60	57	—	3

TABLE 19—continued

Tables showing After History of Quiescent and Arrested Cases (Insured)—continued

1944.

No Tubercle Bacilli found. *Tubercle Bacilli found.*

Stage	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1945	Lost sight of	Died	Sex	Number of Cases marked off as Quiescent	Number known to be still living at end of 1945	Lost sight of	Died
I.	M	56	49	3	4	M	14	13	—	1
	F	48	46	2	—	F	10	10	—	—
II.	M	13	13	—	—	M	31	31	—	—
	F	9	8	—	1	F	26	26	—	—
III.	M	1	1	—	—	M	3	3	—	—
	F	1	1	—	—	F	—	—	—	—
	M & F	128	118	5	5	M & F	84	83	—	1

Abergele, Baguley, and Crossley Sanatoria.

Conditions relative to patients treated in the above sanatoria during the last ten years are set forth in the following tables.

It should be noted that a number of observation cases are admitted to Baguley and are sent to the other sanatoria when found suitable for this form of care. Many of the advanced cases forming so large a proportion of the Baguley admissions improve markedly under treatment and become fit for transfer later to Abergele and Delamere.

The earlier the stage of the disease at which a patient can be given sanatorium treatment the greater the prospect of permanent benefit. Properly selected cases have their best chance of arrest in the shortest time by intelligently carried-out sanatorium treatment ; moreover, they learn restraint, discipline, and an ordered way of life, which are essential for maintenance of health and for prevention of relapses.

Special attention is directed to the analysis of final results for the cases treated at Abergele. These figures have become of value as we can give the after history of patients admitted since the extension of the institution by 210 beds for children in 1931. The response to treatment has been outstandingly good in both pulmonary and non-pulmonary cases, and there is every justification for confidence that the improvement made will be permanent.

Plans for rehabilitation have recently been given much prominence and governmental measures are being taken to implement recommendations made in previous annual reports from 1913 onwards. The results will be summarised in later reports when the schemes have been given an adequate trial.

TABLE 20.

Abergele Sanatorium.

Adult Males—Pulmonary.

Year (1)	No. of new cases (2)	Position at the end of 1945				No. of Re-admissions
		Known to be still living (3)	Died in the Sanatorium (4)	Died elsewhere (5)	Lost sight of (6)	These are additional to the cases in Column 2 and are given to show the number of beds occupied (7)
1936	40	13	5	11	11	9
1937	26	9	4	5	8	12
1938	26	10	2	6	8	9
1939	42	25	2	10	5	9
1940	44	28	10	3	3	—
1941	33	22	3	6	2	4
1942	30	25	—	4	1	6
1943	38	32	1	3	2	9
1944	36	33	1	—	2	4
1945	59	58	1	—	—	—
Total ..	374	255	29	48	42	62

Adult Females—Pulmonary.

Year (1)	No. of new cases (2)	Position at the end of 1945				No. of Re-admissions
		Known to be still living (3)	Died in the Sanatorium (4)	Died elsewhere (5)	Lost sight of (6)	These are additional to the cases in Column 2 and are given to show the number of beds occupied (7)
1936	10	3	—	6	1	—
1937	11	6	—	5	—	2
1938	10	6	—	3	1	1
1939	11	7	1	1	2	—
1940	5	4	1	—	—	—
1941	4	1	2	1	—	1
1942	7	5	—	1	1	1
1943	9	7	1	—	1	—
1944	8	8	—	—	—	—
1945	3	2	1	—	—	—
Total ..	78	49	6	17	6	5

TABLE 20—Continued

Abergele Sanatorium—*continued*

Child Males—Pulmonary.

Year (1)	No. of new cases (2)	Position at the end of 1945				No. of Re-admissions
		Known to be still living (3)	Died in the Sanatorium (4)	Died elsewhere (5)	Lost sight of (6)	These are additional to the cases in Column 2 and are given to show the number of beds occupied (7)
1936	16	11	—	1	4	1
1937	19	13	—	—	6	3
1938	20	15	—	—	5	1
1939	26	20	1	—	5	2
1940	19	16	—	1	2	
1941	21	19	—	—	2	2
1942	16	16	—	—	—	2
1943	32	29	1	—	2	1
1944	28	26	2	—	—	1
1945	24	24	—	—	—	—
Total ..	221	189	4	2	26	15

Child Females—Pulmonary.

Year (1)	No. of new cases (2)	Position at the end of 1945				No. of Re-admissions
		Known to be still living (3)	Died in the Sanatorium (4)	Died elsewhere (5)	Lost sight of (6)	These are additional to the cases in Column 2 and are given to show the number of beds occupied (7)
1936	24	8	6	2	8	2
1937	22	14	4	2	2	—
1938	17	12	1	—	4	—
1939	14	8	2	1	3	1
1940	20	14	4	1	1	—
1941	16	14	2	—	—	1
1942	17	16	1	—	—	—
1943	33	31	2	—	—	—
1944	22	18	2	—	2	1
1945	25	23	2	—	—	—
Total ..	210	158	26	6	20	5

TABLE 20—continued

Abergele Sanatorium—*continued*

Child Males—Non-pulmonary.

Year (1)	No. of new cases (2)	Position at the end of 1945				No. of Re-admissions
		Known to be still living (3)	Died in the Sanatorium (4)	Died elsewhere (5)	Lost sight of (6)	These are additional to the cases in Column 2 and are given to show the number of beds occupied (7)
1936	31	18	1	1	11	—
1937	24	19	—	—	5	1
1938	27	20	—	1	6	3
1939	24	22	1	—	1	3
1940	14	14	—	—	—	3
1941	25	19	2	—	4	2
1942	26	22	—	—	4	—
1943	24	23	1	—	—	1
1944	16	15	—	—	1	—
1945	27	27	—	—	—	3
Total ..	238	199	5	2	32	16

Child Females—Non-pulmonary.

Year (1)	No. of new cases (2)	Position at the end of 1945				No. of Re-admissions
		Known to be still living (3)	Died in the Sanatorium (4)	Died elsewhere (5)	Lost sight of (6)	These are additional to the cases in Column 2 and are given to show the number of beds occupied (7)
1936	28	17	3	3	5	1
1937	24	19	2	—	3	—
193	14	12	1	1	—	3
1939	13	13	—	—	—	2
1940	11	8	—	—	3	—
1941	16	14	—	—	2	—
1942	23	23	—	—	—	—
1943	11	9	1	—	1	2
1944	15	13	2	—	—	—
1945	15	15	—	—	—	—
Total ..	170	143	9	4	14	8

TABLE 21.

Baguley Sanatorium.

Males.

Year (1)	No. of new cases (2)	Position at the end of 1945				No. of Re-admissions
		Known to be still living (3)	Died in the Sanatorium (4)	Died elsewhere (5)	Lost sight of (6)	These are additional to the cases in Column 2 and are given to show the number of beds occupied (7)
1936	235	63	60	90	22	89
1937	264	74	55	104	31	91
1938	188	52	37	75	24	76
1939	186	51	60	60	15	93
1940	213	80	55	60	18	93
1941	181	88	35	46	12	52
1942	198	88	45	56	9	46
1943	218	115	57	39	7	53
1944	173	127	27	16	3	48
1945	196	175	14	4	3	42
Total ..	2052	913	445	550	144	683

Females.

Year (1)	No. of new cases (2)	Position at the end of 1945				No. of Re-admissions
		Known to be still living (3)	Died in the Sanatorium (4)	Died elsewhere (5)	Lost sight of (6)	These are additional to the cases in Column 2 and are given to show the number of beds occupied (7)
1936	144	48	35	53	8	39
1937	148	43	42	48	15	27
1938	148	54	25	48	21	41
1939	131	37	40	37	17	48
1940	133	63	27	30	13	37
1941	136	66	31	31	8	29
1942	140	90	32	13	5	22
1943	167	108	35	18	6	20
1944	165	119	25	13	8	37
1945	191	155	29	3	4	26
Total ..	1503	783	321	294	105	326

TABLE 22.

Crossley Sanatorium.

Males.

Year (1)	No. of new cases (2)	Position at the end of 1945				No. of Re-admissions
		Known to be still living (3)	Died in the Sanatorium (4)	Died elsewhere (5)	Lost sight of (6)	These are additional to the cases in Column 2 and are given to show the number of beds occupied (7)
1936	38	14	—	16	8	15
1937	35	15	2	9	9	11
1938	48	25	1	10	12	8
1939	39	22	2	8	7	11
1940	36	13	6	14	3	8
1941	32	26	2	4	—	8
1942	33	23	2	4	4	8
1943	41	34	1	5	1	9
1944	41	37	2	1	1	2
1945	32	30	1	1	—	4
Total ..	375	239	19	72	45	84

Females.

Year (1)	No. of new cases (2)	Position at the end of 1945				No. of Re-admissions
		Known to be still living (3)	Died in the Sanatorium (4)	Died elsewhere (5)	Lost sight of (6)	These are additional to the cases in Column 2 and are given to show the number of beds occupied (7)
1936	92	43	1	36	12	30
1937	85	40	1	26	18	23
1938	61	29	5	17	10	23
1939	66	32	4	16	14	28
1940	65	48	5	4	8	21
1941	45	34	4	4	3	15
1942	62	48	—	7	7	14
1943	36	30	1	1	4	10
1944	46	44	—	1	1	12
1945	48	47	—	—	1	7
Total ..	606	395	21	112	78	183

PUBLIC VACCINATION.

There are 26 public vaccinators and 4 vaccination officers.

The percentage of infants successfully vaccinated in Manchester was 58·72 in 1944. The percentages for the last five years were :—

Year	*Percentage*
1940	52·19
1941	56·43
1942	58·34
1943	59·19
1944	58·72

The following is a summary of the return made to the Ministry of Health of vaccinations for the year *1944 :—

	Numbers	Percentage
Successful vaccinations	7,668	58·72
Insusceptible of vaccination	21	0·11
Statutory declarations of conscientious objection	3,119	23·88
Died unvaccinated	623	4·77
Postponement by medical certificate	73	0·56
Not traceable (removed to other districts or postponed)	1,555	11·91
Total (= Number of children born)	13,059	100·00

* Returns for vaccination are always for the year preceding the year covered by this report. This is unavoidable, since the period of four months from the date of birth is allowed for exemption purposes.

MANCHESTER MUNICIPAL HOSPITALS PATHOLOGICAL SERVICE.

by Dr. G. Stewart Smith, Director of Pathological Services.

The figures given below show that there has again been an increase in the work of the department during 1945, the total being 110,208 as compared with 102,168 for 1944.

Number of Examinations.

	1944	1945
At Crumpsall Laboratory for :—		
Crumpsall Hospital	29,955	40,541
Booth Hall Hospital	14,234	14,029
Other Municipal Hospitals	1,805	718
Regional Blood Transfusion Service	7,844	5,820
Local Service Establishments	5,522	3,654
Total	59,473	64,762
At Withington Laboratory for :—		
Withington Hospital	30,083	30,074
Regional Blood Transfusion Service	5,352	5,446
Baguley Sanatorium and Emergency Hospital	126	—
Total	35,561	35,520
At Baguley Laboratory for :—		
Emergency Hospital	4,038	4,752
Sanatorium	3,096	4,447
Total	7,134	9,199
At Booth Hall Laboratory for :—		
Booth Hall Hospital	—	727
	Total ..	110,208.

The significant increases are in the blood counts and biochemical examinations at Crumpsall and a general increase at Baguley, both for the Sanatorium and the Emergency Hospital. During the last few years there has been a pronounced increase both in numbers and scope of the biochemical investigations and the appointment of an Assistant Biochemist has now been approved by the Council.

The expansion of the work and the need for extra staff have made structural alterations necessary in the laboratories at Crumpsall and Withington. At Crumpsall a new biochemical laboratory is in course of building and this, together with expansions in the main laboratory, will provide room for several additional workers ; at Withington a ward is being added to the existing small laboratory so as to form a pathological unit which should meet the needs of the hospital for some years to come.

The Council has approved the establishment during the next financial year of a separate laboratory at Booth Hall Hospital, but as a temporary measure, in order to deal expeditiously with the growing demand for haematological work, a technician has been stationed in the present small laboratory at this hospital and her services have been greatly valued.

Dr. T. H. Shaw has returned from active service to take up his post as Senior Assistant Pathologist, stationed at Withington, and Dr. E. G. Hall has taken up duty as Assistant Pathologist at the Crumpsall Laboratory. During the year one member of the technical staff has obtained the degree of B.Sc., as an external student of London University, and two members have gained final certificates of the Institute of Medical Laboratory Technology.

The special investigation by the obstetrical and pathological staff into stillbirth and neonatal death is being continued.

Manchester Municipal Hospitals Pathological Services.

Total Examinations.

At Crumpsall Laboratory for :—		
Crumpsall Hospital	40,541	
Booth Hall Hospital	14,029	
Withington Hospital	509	
Baguley Emergency Hospital	126	
Baguley Sanatorium	8	
Regional Blood Transfusion Service	5,820	
Monsall Hospital	34	
Swinton Home	2	
Langho Colony	27	
R.O.A. School, Styal	12	
Military Registrar, St. Mary's Hospital	5	
Ladysmith Barracks, Ashton-under-Lyne ..	26	
R.A.O.C., Marple	1	
R.A.P.C., Manchester	4	
A.T.S., Victoria Park	34	
R.A.F., Heywood	116	
R.A.F., Heaton Park	1,574	
P.O.W. Camp, Bury	1,801	
P.O.W. Camp, Oldham	93	
		64,762
At Withington Laboratory for :—		
Withington Hospital	30,074	
Regional Blood Transfusion Service	5,446	
		35,520
At Baguley Laboratory for :—		
Emergency Hospital	4,752	
Sanatorium	4,447	
		9,199
At Booth Hall Laboratory for Booth Hall Hospital		727
	Total ..	110,208.

HOSPITALS AND INSTITUTIONS.

General Statistics for the Year ended 31st December, 1945.

	General Hospitals			Special Establishments					Institutions		
	Crumpsall Hospital	Withington Hospital	Booth Hall Hospital	Rose Hill Convalescent Home	Langho Colony	¶ Langho Emergency Hospital	Swinton Home	Dr. Garrett Memorial Home	Park House (Chronic Sick and Mental Wards)	Withington Institution (Chronic Sick and Aged and Infirm Wards)	Totals
1. Total admissions (including infants born in hospital)	10,800	9,531	4,893	175	54	16	12	381	863	521	27,246
*2. Women confined in hospital	2,344	1,943	..	..	..	..	..	..	..	..	4,287
3. Live births	2,257	1,874	..	..	..	..	..	..	..	..	4,131
4. Still-births	92	74	..	..	..	..	..	..	..	..	166
†5. Deaths among the newly-born (*i.e.*, under four weeks old)	81	54	..	..	..	..	..	..	..	..	135
6. Deaths among children under one year (including those given under 5)	83	55	115	..	..	..	..	..	..	..	253
7. Maternal deaths among women confined in hospital	5	4	..	..	..	..	..	..	..	..	9
8. Total number of deaths	1,354	890	183	..	21	23	3	1	226	313	3,014
9. Discharges (including infants born in hospital)	9,360	8,435	4,641	187	54	74	21	419	588	256	24,035
10. Duration of stay of patients included in 8 and 9 above—											
(*a*) Four weeks or less	8,537	7,660	3,785	80	8	..	..	8	495	34	20,607
(*b*) Exceeding four but under thirteen weeks	1,731	1,332	780	42	22	..	..	256	163	136	4,462
(*c*) Exceeding thirteen weeks	446	333	259	65	45	97	24	156	156	399	1,980
11. Beds occupied—											
(*a*) Average during the year	1,155	671	331	35	569	155	123	102	588	699	4,428
(*b*) Highest	1,267 on 6-6-45	729 on 2-8-45	400 on 17-12-45	51 on 30-5-45	587 on 8-1-45	215 on 22-2-45	130 on 10-7-45	127 on 31-7-45	646 on 15-12-45	747 on 17-2-45	..
(*c*) Lowest	1042 on 23-12-45	577 on 24-12-45	263 on 14-8-45	5 on 3-11-45	551 on 14-10-45	126 on 31-12-45	110 on 28-9-45	74 on 31-12-45	583 on 23-1-45	667 on 27-12-45	..
‡12. Surgical operations under general anaesthetic (excluding dental operations)	1,739	1,891	1,850	..	..	..	..	..	..	..	5,480
13. Abdominal sections	812	721	256	..	..	..	..	..	..	..	1,789

* Relates to women discharged from or dying in hospital.

† Relates only to children born in hospital.

‡ Including spinal anaesthesia.

¶ The Emergency Hospital attached to the Langho Colony is being used to accommodate chronic sick patients transferred, temporarily, from both Crumpsall and Withington General Hospitals.

Average Duration of Stay.

The average duration of stay in hospital for all cases " dismissed " in 1945 was 28·53 days, as compared with 26·13 days in 1944, and 27·67 days in 1943. Details of the last five years are given in the subjoined table.

Average duration of stay of patients discharged from or dying in the three general hospitals.

Hospital	1941—Days	1942—Days	1943—Days	1944—Days	1945—Days
Booth Hall	26·54	26·32	23·93	22·42	25·80
Crumpsall	46·20	32·29	33·28	31·07	34·28
Withington	26·10	22·80	23·51	22·68	23·33
All three hospitals	34·59	27·35	27·67	26·13	28·53

Classification (by disease groups) of days of maintenance of patients discharged from or dying in the General Hospitals, 1945.

	BOOTH HALL		CRUMPSALL		WITHINGTON		TOTALS	
DISEASE GROUP	Total days	Average stay (days)	Total days	Average stay (days)	Total days	Average stay (days)	Total days	Average stay (days)
1. *Infectious disease	13,674	52·59	9,372	41·47	37,543	97·01	60,589	69·40
2. Cancer and other tumours	184	26·29	14,868	37·17	9,558	39·01	24,610	37·74
3. Rheumatism, diseases of nutrition, etc.	8,476	75·01	9,827	49·88	7,093	41·00	25,396	52·58
4. Diseases of blood and blood-forming organs	990	47·14	2,175	44·39	1,116	22·32	4,281	35·68
5. Chronic poisoning	..	..	15	3·75	7	1·75	22	2·75
6. Diseases of nervous system and sense organs	9,896	49·73	71,842	192·09	7,517	27·84	89,255	105·88
7. Diseases of circulatory system ..	4,177	38·68	29,446	55·87	11,847	28·41	45,470	43·22
8. Diseases of respiratory system ..	15,734	23·88	22,405	36·14	13,268	26·64	51,407	28·92
9. Diseases of digestive system.. ..	18,223	9·50	21,405	22·82	21,890	22·07	61,518	15·98
10. Non-venereal diseases of genito-urinary system	2,072	25·58	19,344	22·70	18,877	24·39	40,293	23·60
11. Diseases of pregnancy, childbirth, and the puerperal state	..	..	7,181	10·65	7,759	11·19	14,940	10·93
12. Diseases of the skin	28,817	49·34	10,202	35·18	6,940	24·52	45,959	39·72
13. Non-tuberculous diseases of bones, joints, etc.	4,491	47·78	2,679	39·99	3,883	39·22	11,053	42·51
14. Congenital malformations	1,061	35·37	26	13·00	52	6·50	1,139	28·48
15. Diseases of early infancy	2,547	48·06	543	7·34	748	10·25	3,838	19·19
16. Old age, senility, and senile decay..	..	..	70,368	193·32	2,767	34·16	73,135	164·36
17. †Violence	6,474	16·99	12,075	32·55	13,712	36·37	32,261	28·57
18. Ill-defined diseases	1,185	11·97	697	11·81	245	13·61	2,127	12·09
19. Convalescence	1	1·00	..	..	..	..	1	1·00
20. ‡Healthy	6,459	29·90	62,675	13·57	52,760	13·59	121,984	13·98
Totals	124,461	25·80	367,235	34·28	217,582	23·33	709,278	28·53

* Including tuberculosis patients. † Including accidents asssociated with fracture.

‡ Including mothers and infants discharged from maternity wards.

Sources of admission of patients discharged from or dying in General Hospitals during the Year ended 31st December, 1945 (excluding births).

Sources of Admission	Booth Hall Hospital	Crumpsall Hospital	Withington Hospital	Totals
District medical officer	63	57	—	120
General practitioner	1,968	4,499	3,855	10, 322
Voluntary hospital	694	163	93	950
Municipal institution *	75	73	47	195
Municipal hospital *	154	71	42	267
Other †	1,673	2,685	2,383	6,741
Staff cases ‡..	2	97	114	213
Maternity and child welfare centres..	117	193	3	313
Accident ward	75	2	322	399
Emergency	3	617	592	1,212
Totals	4,824	8,457	7,451	20,732

* Transfers.

† At Booth Hall Hospital the classification "Other "includes cases sent in by the Education Department and the central Public Health Department. Maternity cases are classified as "Other " at Withington and Crumpsall Hospitals.

‡ Includes staff from Corporation establishments other than Public Health establishments.

ABERGELE SANATORIUM.

By Dr. G. F. Barran, Medical Superintendent.

Staff.

(A) Visiting Consultants :—

E. D. Telford, M.A., M.SC., F.R.C.S., Surgeon.
J. Roberts, M.B., CH.B., F.R.C.S., Ear, Nose, and Throat Surgeon.
T. J. Phillips, M.R.C.S., L.R.C.P., Ophthalmologist.
R. J. Pye, L.D.S., Dentist.

(B) Full time :—

G. F. Barran, M.B., CH.B., Medical Superintendent.
M. Icht, M.R.C.S., L.R.C.P., Deputy Medical Superintendent.
Natalie E. Drach, M.D. (Vienna), Resident Assistant Medical Officer.
Jane Owen, S.R.N., S.C.M., Matron.
H. E. Connolly, Secretary-Steward.

The available beds are allocated according to the age of the patient and the type of disease, as follows :—

Age	Type of Tubercle	Sex		Beds
		M.	F.	
1—4	Bone and Joint Tuberculosis	10	10	20
4—15	,, ,,	35	35	70
1—4	Primary Tuberculosis and its complications	10	10	20
4—15	,, ,,	34	34	68
—	Admission Ward	—	—	11
		89	89	189
Adults (Plas Uchaf)	Pulmonary Tuberculosis	52	—	52
		Total available beds		241
	Isolation Ward	—		10

TABLE 1.

General Classification of Cases Treated.

Classification on Admission	In residence on 1st January, 1945		Admitted		Discharged		Died		In residence on 31st December, 1945	
	Adults	Children	Adults	Children	Adults	Children	Adults	Children	Adults	Children
Pulmonary Group :—										
T.B. Minus	15	66	26	35	19	38	—	1	22	62
T.B. Plus, Group 1	1	7	3	8	2	4	—	—	2	11
T.B. Plus, Group 2	27	8	31	4	31	7	4	1	23	4
T.B. Plus, Group 3	5	4	2	1	4	2	—	1	3	2
Observation	—	1	—	9	—	1	—	—	—	9
Non-Pulmonary Group :—										
Bones and Joints	—	61	—	30	—	21	—	1	—	69
Abdominal	—	8	—	6	—	9	—	—	—	5
Other Organs	—	—	—	1	—	—	—	—	—	1
Peripheral Glands	—	6	—	3	—	6	—	—	—	3
Observation	—	1	—	3	—	3	—	—	—	1
Totals	48	162	62	100	56	91	4	4	50	167

TOTAL PATIENTS TREATED.

Adults' Section of the Sanatorium..	110
Children's Section of the Sanatorium	262

TABLE 2.

The result of treatment in the 147 discharged cases was as follows (four observation cases and four patients who were in residence for less than 28 days, are excluded from this table) :—

	Total Cases Discharged	Quiescent	Improved	Stationary	Worse	Died
Adults (pulmonary)	56	5 (8·9%)	42 (75·0%)	4 (7·2%)	1 (1·7%)	4 (7·2%)
Children (pulmonary)	54	21 (38·9%)	28 (51·9%)	2 (3·7%)	—	3 (5·5%)
Children (non-pulmonary)	37	20 (54·1%)	13 (35·1%)	2 (5·4%)	1 (2·7%)	1 (2·7%)

The figures in brackets indicate the percentage of the total patients in each group discharged with their disease in the condition stated at the head of the column.

It is of interest to record that of the 54 children discharged in the pulmonary group 49, or 90·8 per cent., were either quiescent or improved on discharge ; and of the 37 children discharged in the non-pulmonary group 33, or 89·2 per cent., were either quiescent or improved on discharge.

Of the 56 adult patients discharged 47, or 83·9 per cent., were either quiescent or improved on discharge.

The children who died were in residence for 256, 250, 137, and 101 days respectively. The cause of death was :—

(1) Tuberculous meningitis.

(2) Tuberculous meningitis.

(3) Pulmonary tuberculosis.

(4) Pulmonary tuberculosis.

General Observations.

It can be well understood that the year's work has been overshadowed by the ever present anxiety of staffing the institution. The widespread shortage of nursing and domestic help, common to all sanatoria and most hospitals, is producing chaos in the tuberculosis service of the country ; a service which has been carefully built up during the last thirty years.

With regard to sanatoria a difficult decision has to be made as to whether wards should be closed and adequate treatment be given to the few, or whether every endeavour should be made to keep all beds occupied in face of serious difficulties. The latter alternative has been adopted at Abergele and, owing to the response from a very loyal but depleted staff, it has been possible to keep the adult section fully occupied, and on the children's side, although the admission ward of 11 beds was closed in August, 1945, it has not been necessary to refuse the admission of any child. It must be frankly admitted that this has not been possible without throwing great strain on the staff concerned. It is not practicable for this additional effort to be indefinitely maintained and sooner or later breaking point will be reached.

Improvements can well be made in nursing quarters and recreational facilities, and it is at times disappointing for structural improvements to be held up owing to the lack of sufficient priority being given foi this class of work. Hours and conditions now compare sufficiently favourably with those in other walks of life for a plea to be made to end the stress placed upon the alleged disadvantages of hospital work, and for a fuller realisation of the advantages accruing to the well trained nurse or maid. It must, however, be admitted that many view with misgiving at the present time the raising of the standard of education before entering the profession and the increased complexity of the syllabus.

Whatever the response to the nursing recruitment campaign, it must be appreciated that with the huge demand for nurses the number coming forward will continue to fall below that desired and greater use must be made of male nurses, many of whom can perform admirable work on male wards and in the theatre and other auxiliary departments. Male labour may also be increasingly used for the provision of domestic orderlies and the employment of some 20 of these at Abergele has been most successful.

Whilst the scheme whereby sanatoria are affiliated with general hospitals has been an undoubted success, the arrangement sponsored by the Ministry and working satisfactorily in certain municipal hospital services whereby nurses are seconded for a minimum period of three months to a tuberculosis hospital, during the second year of their training, should be generally introduced ; thus, all nurses would be brought into contact with the tuberculosis problem and learn to realise its appeal and the special gifts required for the treatment of long-term patients, whilst the happy and more intimate corporate sanatorium life might attract the nurse to this special work after the completion of her training.

Clinical.

There have been no radical changes in therapeutic measures during the year. Rest in bed, with graduated exercises later, remains the standard treatment for the children with primary tuberculosis. Those with bone and joint diseases are treated conservatively in the first place by immobilisation, with the help of operative measures of fixation in certain cases later. It has, however, been gratifying to find how many children with early involvement of the knee do well on purely conservative treatment with a return to full mobility. Naturally, a long follow-up is necessary for final judgment as there is a tendency to osteo-arthritic changes later.

The adult section caters for pulmonary tuberculosis in its early stages and promising results continue to be obtained, with accentuation on the early induction of lung relaxation by collapse therapy in an increasing number of cases.

Intravenous gold is still used, but its value remains somewhat problematical.

Preliminary reports on the use of Tuberculin Jelly in skin testing indicate its usefulness. It appears comparable to the Mantoux test (0·1 milligram) up to the age of puberty, but after that, owing probably to increasing thickness of the skin, it tends to lose its efficiency. As a simple method of investigation in the hands of a general practitioner it can, at this stage, be strongly recommended for children up to the age of twelve.

The tables below show the work performed :—

Pneumothorax.	
Inductions	28
Refills	807
Gold Salts	5

Operations.

The operations performed during the year were as follows :—arthrodesis 5, excision of knee joint 3, amputation of arm 1, amputation of fingers 1, phrenics 13, resection of rib 1, tonsils and adenoids 5, miscellaneous 15, totalling 44.

Plaster Work.

The number of plaster splints made was 135.

Valuable assistance in the making of splints is given by the occupational therapy centre at Plas Uchaf.

Laboratory Work.

The chief work consists of the examination of sputa. In those without sputum the culture of gastric contents is resorted to in both adults and children, although the number of those found positive in adults is small. The method of concentration used is that of Jungmann who devised a simple and most effective method of liquefying sputum by dissolving the mucous in hydrogen peroxide and sulphuric acid, to which a trace of ferrous sulphate had been added. The advantages of the method are the smaller centrifugal deposit, its efficiency in dealing with secondary organisms, and its speed.

Specimens examined and other work done during the year :—

Sputum—Ordinary examination (Ziehl-Neelsen)	288
Inoculation (Löwenstein-Jensen medium)—	
Gastric contents	146
Sputum	123
Pus	14
Faeces	3
Urine	6
Urine tests—Ordinary examination	190
Total	770

X-ray Department.

The apparatus, during the year, has been rendered shockproof, and two new Machlett tubes and a stabiliser have been installed with a resulting increase in the set's safety and efficiency. Considering the low power of the apparatus with single valve rectification the radiographic technique can now be considered satisfactory. The total number of X-ray films taken during the year was 1,229 and there were 612 screening examinations.

Structural.

Structural changes in the children's wards to include playrooms and treatment rooms are still awaited with patience and some hope of completion in the coming year. It is distressing to have to admit that the air-raid shelters which, it had been hoped, would be removed at the end of the war are to be converted " temporarily " into stock rooms and stores accommodation. It is feared that these blots will remain on the landscape for a rather indefinite period, but it is admitted that an alternative, bearing in mind the present difficulty in obtaining consent for the erection of new buildings, is not apparent.

School.

The Head Teacher continues successfully to apply herself with much diligence and enthusiasm to the educational part of the sanatorium activities. She has made it her direct concern that a child, backward owing to previous ill-health, should have ample opportunity to make up lost ground and on discharge to be well grounded in essentials. It is indeed gratifying to see the improvement in learning and self-confidence made by so many of the children.

The school has been, to a large extent, re-equipped and one of the schoolrooms converted into a library.

Farm.

During the year possession of the Bryn Ewin Farm Buildings and of an additional 42 acres of land has been obtained ; the new acreage will be helpful in the growing of additional food crops for the enlarging herd, and it is intended to use the buildings for the housing of dry cows.

Pig keeping at Ysgieriallt Farm has been discontinued, the old pigsties have been removed, and an open yard for the accommodation of calves constructed. The future policy is to keep all young stock isolated at Ysgieriallt as a precaution against infection from the rest of the herd and, in particular, from Johne's disease.

Kitchen Garden.

Following the purchase of a Ransome cultivator it has been possible to take a further acre into the kitchen garden. The gardens continue to do well in providing the patients and staff with a second vegetable for every day of the year, as well as a very valuable apple crop.

BAGULEY SANATORIUM.

By Dr. H. G. Trayer, Medical Superintendent.

Staff.

(A) Visiting Consultant—

A. Graham Bryce, M.D., F.R.C.S., D.P.H., Surgeon (Thoracic Surgery).

(B) Full time—

H. G. Trayer, M.B., B.CH., B.A.O., D.P.H., Medical Superintendent.

A. J. Coello, Doctor in Medicine and Surgery (Barcelona), D.P.H. (Barcelona), Deputy Medical Superintendent.

W. A. Anderson, M.B., CH.B., Resident Assistant Medical Officer.

E. Burman, M.R.C.S., L.R.C.P., Resident Assistant Medical Officer.

P. J. McEnroy, M.B., B.CH., B.A.O., Resident Assistant Medical Officer (Supernumerary).

Norah H. Burrows, S.R.N., S.C.M., Matron.

R. L. Hall, Secretary-Steward.

* Beds—full establishment—420.

The number of patients admitted was 515, the daily average number of beds occupied being 354.

Number of Admissions, Discharges, etc., compared with the previous four years.

	1941	1942	1943	1944	1945
Number of patients—					
In hospital, 1st January	279	331	322	362	323
Admitted	406	436	498	461	515
Discharged	271	365	392	416	405
Died	83	80	66	84	104
Total treated	685	767	820	823	838
Remaining in hospital, 31st December	331	322	362	323	329
Daily average number of beds occupied	300	330	366	373	354·6
Average length of stay of patients discharged—					
Males (days)	203	240	209	254	255
Females ,,	244	261	293	276	276
Average length of time in hospital of fatal cases—					
Males (days)	278	248	208	411	474
Females ,,	194	231	288	276	164
Case mortality	12·12	10·43	8·05	9·79	12·303

North Cheshire Joint Hospital Board.

Patients admitted from the districts of the North Cheshire Joint Hospital Board are included in all totals given in this report. The details of such cases are :—

In hospital, 1st January	8
Admitted	13
Discharged	10
Died	4
Remaining in hospital, 31st December	7

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* Owing to the shortage of nurses and hospital helpers it has not been possible to open the full establishment of 420 beds. The average number of beds available was 363.

Summary of Immediate Results of Treatment.

Classification	Condition on discharge					Total
	Quiescent	Improved	Stationary	Worse	Died	
Class T.B. Minus	—	84	9	6	5	104
Class T.B. Plus, Group I	1	4	1	—	—	6
Class T.B. Plus, Group II	1	174	59	8	52	294
Class T. B. Plus, Group III	—	13	10	4	47	74
Totals	2	275	79	18	104	478

Observation Cases.

Diagnosis on discharge from observation	Stay under 4 weeks		Stay over 4 weeks		Totals		Total
	M.	F.	M.	F.	M.	F.	
Tuberculous	1	1	8	5	9	6	15
Non-Tuberculous	6	2	3	4	9	6	15
Doubtful	—	1	—	—	—	1	1
	7	4	11	9	18	13	31

Co-ordinated Thoracic Surgery Service.

47 patients were admitted under this scheme ; details are given below :—

Admitted from	Operative treatment required					
	Thoracoplasty	Drainage	Phrenic Nerve	Adhesion Cutting	Thoracoscopy	Abscess—chest wall opened
Birmingham	1	—	—	—	—	—
Bolton	4	1	2	3	2	—
Bury	2	—	—	—	—	1
Holt (Norfolk)	1	—	—	—	—	—
Oldham	1	—	3	2	—	—
Salford	—	—	2	2	1	—
Warrington	—	—	—	7	6	—
Wigan	3	—	2	1	—	—

The following operative work has been carried out in the theatre. The figures include those cases shown under the Co-ordinated Thoracic Surgery Service, and Manchester cases treated in this sanatorium or transferred from other Manchester Sanatoria for operative treatment.

Thoracoplasty	79
Phrenic nerve operations	32
Jacobaeus operation	24
Monaldi Cavity Drainage	7
Thoracoscopy	29
Bronchoscopy	7
Stab Drainage	8
Abscess—chest wall opened	1
Schede's operation	1
	188

There is now a system of follow-up examinations of all thoracoplasty cases.

Physiotherapy Department.

The importance of physiotherapy in the pre- and post-operative treatment of patients undergoing major surgery of the chest is shown in the following figures :—

Daily average number of patients on register	18
Total number of treatments during the year	3,287

Pathological Laboratory Report.

Examination of—

Sputum	3,309*
Blood	232
Urine	104
Smears for gonococci	4
Faeces	54
Cerebro-spinal fluid	38
Pus—microscopical	50
cultural	63
soluble haemolysin	1
Effusions—microscopical	358
cultural	180
Fractional gastric analysis	2
Penicillin estimations	3
,, sensitivity tests	6
Miscellaneous examinations	2

* Number Positive for Tubercle Bacilli—1,286.

Radiological Department.

Skiagrams taken	2,172
Patients screened	5,200

Dental Report.

Attendances	409
Extractions	173
Fillings	50
Scraping and cleaning	7
Dentures	14
Repairs and adjustments to dentures	18

The dentist also paid many visits to the wards to examine mouths and carry out dental treatment of bed patients.

Occupational Therapy.

This form of treatment still proves of great value. Its application has in no way changed since its introduction some twenty years ago, despite the precedent established in other hospitals. It has been proved here that any lasting scheme must be prepared to weather the rough waters of a slump as well as glide through the smooth waters of a boom.

The foreshadowed industrial activity, coupled with the extension of the housing estate within such a short distance of the Sanatorium, once more brings up the vision of a small factory for ex-patients where they could work under the same medical care that has been responsible for the restoration of whatever physical capacity they have attained.

Recreation.

Entertainments have not yet returned to the pre-war scale. The weekly, and at times bi-weekly, cinema shows are much appreciated. The competitions devised for bed patients only are deservedly popular. The Record Club has now an extensive library, and goes on the air twice a week with programmes selected by each ward in rotation.

" *San Toy* " returned in time to convey Christmas and New Year greetings and it is expected that this publication will again become a monthly feature.

Staff.

Successful candidates during the year for the following examinations :—

Tuberculosis Association Examination	2
Preliminary State Examination	2

No report under this heading could ignore the present acute shortage of nurses and hospital helpers, resulting in the closing of beds, thus depriving many citizens, disabled by the disease, of the opportunity of receiving sanatorium treatment.

BAGULEY EMERGENCY HOSPITAL.

By Dr. H. G. Trayer, Medical Superintendent.

It appears opportune to review in some detail the work carried out in the special departments of this hospital, particularly as it appears unlikely that these activities will terminate when the Emergency Medical Service no longer functions.

The figures for the Ear, Nose, and Throat Departments, and for the General Medical and Surgical sections, are included in the totals of the first table.

The resident medical staff consists of 5 medical and 2 dental officers.

The number of available beds was (average) 350.

Admissions, Discharges, etc., 1945.

	Civilian patients	Service patients
Number of patients—		
In hospital, 1st January	4	401
Admitted	272	2,848
Discharged	238	3,045
Died	1	9
Remaining in hospital, 31st December	37	195
Daily average number of beds occupied	25	308
Average length of stay of patients discharged—		
Male	52·6 (days)	34·69 (days)
Female	32·3 (days)	24·84 (days)
Average length of time in hospital of fatal cases—		
Male	43 (days)	59·6 (days)
Female	—	—
Case mortality	·306	·208

Service Cases.

Ages	Chest	Plastic	Jaw	Others	Total
18—24	66	245	72	571	954
25—34	131	202	99	991	1,423
35—44	47	35	32	321	435
45—54	3	6	1	25	35
55 and over	—	—	—	1	1
	247	488	204	1,909	2,848

Civilian Cases.

Ages	Chest	Plastic	Jaw	Others	Total
0—14	1	24	2	—	27
15—24	12	53	8	16	89
25—34	10	62	31	6	109
35—44	3	10	9	2	24
45—54	—	8	3	2	13
55 and over	—	—	10	—	10
	26	157	63	26	272

Theatre.

The number of operations during the year were as follows :—

Chest	12
Jaw and Plastic	765
General	940
E.N.T.	201
	1918

Chest Unit Report.

The Director and Surgeon, A. Graham Bryce, F.R.C.S., is assisted by a Visiting Physician, a Resident Medical Officer, and three visiting Anaesthetists.

Admissions.

Chest cases admitted, 255.

Analysis.

Gun shot wound in chest with—	
Recent haemothorax	2
Clotted haemothorax	5
Infected haemothorax	1
No haemothorax	10
Old haemothorax	35
G.S.W. (Abdomino-thoracic)	7
G.S.W. chest wall	3
G.S.W. chest wall with foreign bodies in chest wall	3
Crush injuries	6
Empyema—acute (either G.S.W. or	5
,, chronic post pneumonic)	34
Blast injuries	1
Bronchiectasis	39
Congenital Cystic Lung	2
Lung Abscess	11
Carcinoma Lung	5
Mediastinal Tumour	2
Dermoid Cyst of Lung	1
Hydated Cyst of Lungs	1
Congenital Heart	1
Asthma	10
Pleurisy	20
Haemoptysis	6
Chronic Bronchitis	17
Purulent Bronchitis	3
Pneumonia	6
Unresolved Pneumonia	2
Pulmonary Tuberculosis	17
Total	255

Brief review of treatment given.

Recent haemothoraces were treated by aspiration and penicillin intrapleurally, with satisfactory results.

Clotted haemothraces were treated by thoracotomy and removal of clot and, in some cases, decortication.

Chronic empyemas were treated by gradual shortening of the tube, controlled by sinograms and by various plastic operations, where necessary.

Bronchiectasis and lung abscess cases all had postural drainage, and, in some cases, penicillin. The former were investigated by bronchograms and bronchoscopy, etc., with a view to possible lobectomy.

Operations Performed in the Chest Theatre.

Thoracotomies for—		
Acute Empyema	2	
Carcinoma	3	
Foreign body in Lung	7	
Clotted haemothorax	2	
Bronchiectasis	4	
	—	18
Bronchoscopy		23
Curettage		5
Plastic operations for chronic Empyema		8
Thoracoplasty		1
Removal of foreign body in chest wall		1
Thoracoscopy		1
Examinations under anaesthetic		2
Total		59

Minor operations, such as removal of foreign bodies under local anaesthetic and intercostal drainage, are not included in these figures.

Follow-up of patients—

(*a*) Referred to Mr. Graham Bryce's out-patients' clinic at the Manchester Royal Infirmary.

(*b*) Attend Baguley Emergency Hospital at regular intervals.

(*c*) Referred to Ministry of Pensions to be seen at a Chest Centre near their homes.

Jaw and Plastic Unit.

Director—Professor F. C. Wilkinson, M.SC., M.D., D.D.SC.

On the 19th November, 1945, Mr. A. H. R. Champion, F.R.C.S., and his team, took over the Plastic Section, previously under Dr. Gabarro, who remains to assist in the work.

Mr. Moule is Dental Officer in charge of the Jaw Injuries and Dental Unit. One Resident Medical Officer, one Non-resident Medical Officer, two Resident Dental Officers, one Resident Anaesthetist and visiting Anaesthetists, complete the staff of the Unit.

Jaw Injuries Unit.

New cases treated		222
Analysis—		
Jaw	133	
Other disabilities	40	
Ancillary to Plastic Unit	49	
		222
Civilian cases	44	
Service cases (including pensioners)	178	
		222
Operations performed, excluding ordinary extractions but including removal of Cysts, reduction of fractures, etc.		146

Dental Radiological Department.

Intra-oral exposures	169
Occlusal	149
Extra-oral	456

Dental Section.

Cases inspected	911
Cases treated	665
Extractions performed	533
Fillings inserted	342
Scale and polishes	243
Gum treatments	86
Dentures inserted	159
Dentures repaired	60

(For all categories, including routine Maxillo-Facial cases, but excluding special prostheses.)

Analysis	Jaw and Plastic patients	Other patients	Hospital staff	Total
Extractions	378	127	28	533
Conservations	110	198	34	342
Scale and Polish	112	118	13	243
Gum treatments	16	52	18	86

Dental Technician's Report.

(A) Apparatus used for Injuries—

Splints	97
Locating Bars	27
Jaw Exercises	7
Epithelial inlay stagings	16
Special Acrylic Moulds	28
Eye Moulds	10
Nose Moulds	9
Artificial Eyes	4
Artificial part-hands	2
External Jaw Supports	4

(B) Dental—

Cast-metal Dentures	10
Large Prostheses	37
Full Acrylic Dentures	55
Part Acrylic Dentures	104
Repairs to Dentures	60
Acrylic Teeth made	900
Gold inlays	12

Plastic Unit.

Service cases admitted	488	
Civilian cases admitted	157	
		645

Deaths during the year—

Service cases	Nil.
Civilian cases	Nil.

Burn cases admitted—

Service cases	98
Civilian cases	157

Brief Summary of Operations.

Free Skin Grafts	232	
Facial Plastics	216	
Extremity Plastics	171	
		619

Combined Photographic Section Report.

Clinical photographs taken	4,813
Routine prints made	16,845
Special prints, including enlargements	5,214

Pathological Department.

The pathological work of the hospital is under the direction of the Director of Pathological Services of the Public Health Department, whose report covers the work done at this hospital.

Radiological Department Report.

Dr. G. Q. Chance, M.B., CH.B., D.M.R.E., submits the following report of the work done in the Radiological Department of this hospital.

The number of skiagrams taken were :—

Sinograms	200
Bronchograms	400
Barium meals	2,400
Renal investigations	560
Sinus and mastoid	800
Skull	72
Facio Maxillary investigations	830
Chest	1,600
Bone films for orthopaedic and injuries to skeleton	1,030
Gall bladder investigations	120
Others	212

Physiotherapy Department.

Treatments	14,605

Average patients per month on Register :—

Chest cases	45
Plastic Cases	24
Medical and Orthopaedic cases	42

Patients.

The figures show that the majority of patients treated were Service cases.

Occupational Therapy.

This has been mainly diversional and, as the finished products were mainly articles in short supply, individual patients have had no difficulty in disposing of them. It appears doubtful that this principle would prove satisfactory under normal conditions. In purely curative occupational therapy, the onus of disposal of the finished product should not necessarily rest on the patient, as it is possible that the most suitable craft for his disability may not be a profitable one. The principle of payment for work done under any scheme of curative occupational therapy should not be contemplated.

Education.

The scheme for Service patients has functioned fairly well, though the absence of a permanent classroom is a continual handicap. No civilian patients have availed themselves of the scheme existing for their benefit.

Physical Training.

For most of the year under review Service instructors were available, with much benefit to the morale and physical well-being of the patients. It is hoped that the future will see the re-introduction of this most useful adjunct to the complete rehabilitation of the majority of patients.

During the year a scheme of remedial treatment was inaugurated, which functioned effectively as long as each section was fully staffed.

It should be recorded that when the hospital was built, no special buildings were provided for any of these activities. If rehabilitation is to remain an integral part of treatment at this hospital, suitable accommodation should be provided.

Recreation.

The inadequate provision of facilities for communal recreation necessitated using a ward for entertainments. The amenities for indoor games have been much improved by the provision of a Recreation Hut. The provision of outdoor recreation is very limited owing to the fact that the ground round the hospital has not yet been laid out.

This opportunity is taken to thank once again all those who provided presents, parties, and entertainments, not only for Service patients, but, on many occasions, for all patients able to enjoy them.

Staff.

Similar to most other hospitals there has been a shortage of nurses and hospital helpers.

Both sections are indebted to voluntary workers for the generous and willing help that they gave at a time when, without it, the patients might not have received the care and attention that they so rightly deserved.

This brief report of the activities of this hospital can neither convey the real picture of the amount of work that has been done nor detail the difficulties that had so often to be overcome.

BOOTH HALL HOSPITAL.

By Dr. W. H. Patterson, Medical Superintendent.

STAFF.

(a) *Visiting Consultants*—

J. F. Ward, M.D., F.R.C.P.	Physician	
Sylvia K. Guthrie, M.D., M.R.C.P.	Physician	
N. G. Godfrey, M.B., B.S., F.R.C.S.	Surgeon	
W. Bryce McKelvie, M.D., CH.M., F.R.C.S., D.L.O.	Ear, nose, and throat surgeon	
W. Sayle Creer, M.B., M.CH., F.R.C.S.	Orthopaedic surgeon	
T. Milnes Bride, M.D.	Ophthalmologist	
J. White, M.B., CH.B., D.M.R.E.	Radiologist	
E. Marianne Peach, M.D., D.P.H.	Dermatologist	
G. Whitehead, M.B., CH.B.	Venereologist	
J. C. Nicholson, M.B., CH.B., D.A.	Anaesthetist	
H. P. Taylor, L.D.S.	Dentist	
B. P. Robinson, M.B., CH.B., F.R.C.S.	Ear, nose, and throat surgeon	*
H. P. Lawson, F.R.C.S., D.L.O., L.D.S.R.C.S.	Ear, nose, and throat surgeon	
M. Gordon, F.R.C.S., D.L.O.	Ear, nose, and throat surgeon	
H. J. Brennan, M.D., D.A.	Anaesthetist	
Olive M. Gimson, M.B., CH.B.	Anaesthetist	
J. C. Nicholson, M.B., CH.B., D.A.	Anaesthetist	

* For the Education Committee's tonsils and adenoids surgical service.

(b) *Full time.*

W. H. Patterson, M.D., D.C.H.	Medical Superintendent
P. A. Jennings, M.B., B.CH., B.A.O., D.P.H.	Deputy Medical Superintendent
D. Tierney, M.B., B.CH., B.A.O.	Resident Surgical Officer
Muriel C. Andrews, M.B., CH.B.	Resident Assistant Medical Officer
Ethel F. Caplan, M.B., CH.B.	Resident Assistant Medical Officer
A. P. Kalra, M.B., CH.B.	Resident Assistant Medical Officer
Marie M. Pugh, M.B., B.CH., B.A.O., L.M., D.P.M.	Resident Assistant Medical Officer
Christina K. Lees, S.R.N., S.C.M., R.F.N.	Matron
H. Taylor	Secretary-Steward

General.

In the first report since the cessation of hostilities disappointment at the virtual absence of structural improvements since 1938 is offset by the fact that the hospital has been spared damage and, in spite of alerts and alarms, no patient ever had to leave a warm bed for the cold protection of an air raid shelter, The average weekly admission rate was 94. The peak month for admissions was November with 512. The out-patient attendances show an increase of 2,335 over 1944. In make-shift accommodation, without additional medical and nursing staff, the position is obviously unsatisfactory. With the erection of a colony of prefabricated houses adjacent to the hospital it is anticipated that the work of the department will increase further. It is hoped that plans for better accommodation will have materialised in time to cope with the situation.

Statistics.

In-patients	5,247
Out-patients	2,315
Admitted	4,893
Duration of stay (days)	24·4
Deaths (all ages)	193

Age Groups of Admissions.

Under 1 month	97
One month to 1 year	605
1 to 2 years	514
2 to 4 years	907
5 to 11 years	2,134
12 to 15 years	579
16 years and over	57

Deaths.

Of the total deaths 128 were infants under 1 year and 65 were of patients over 1 year.

The detailed causes show no statistical difference of significance. Respiratory conditions and gastro-enteritis account for 38 and 35 deaths respectively. Tuberculosis (all forms) was the cause of death in 32 patients. 10 patients died of incurable congenital defects as compared with 21 in 1944.

There was only 1 death from burns or scalds during the year out of the 65 which required admission to hospital.

Infectious Diseases.

Dysentery has again been the most troublesome infection. The actual illness is brief, but the patient remains a source of danger for long periods and Sonne infections in particular do not respond well to any of the sulphonamides at present available. There were 86 recognised cases of Sonne dysentery, 39 of which were admitted with the condition and 47 secondary cases arose in the wards.

Of the other infectious diseases 39 cases of pertussis and 22 of measles were admitted, but the relatively easy control of these conditions was successfully carried out.

Departments.

Casualty and After-Care Department.

Attendances	1945		1944	
	Children	Over 16 years	Children	Over 16 years
First Attendances	2,026	267	1,719	221
Subsequent Attendances ..	5,847	417	4,053	229
	7,873	684	5, 772	450

In addition 22 Emergency Medical Service cases attended and made 26 subsequent attendances.

	1945	1944
Subsequently admitted to hospital ..	235	198
Adults transferred to other hospitals ..	77	95
Road accidents	27	9

Surgical Department.

	1945	1944
Operations performed in theatre	2,093	1,701
General surgical emergencies	260	180

Some operation details :—

	Performed by Consultant Staff	Performed by Resident Surgical Officer.
Pyloric stenosis	2	5
Intussusception	2	7
Intestinal obstruction from other causes	..	4
Appendicitis	10	158
Appendicitis and General Peritonitis	6	35
Osteomyelitis	5	34
Hernia	..	33
Empyema	..	10
Mastoid:—		
(i.) Simple	10	4
(ii.) Radical	4	..
Total	39	290

Ear, Nose, and Throat Department.

	1945	1944
Patients examined by Aurist .. .. (in-patients 540, out-patients 464)	1,004	1,020
Specially examined in wards	61	134
Tonsils and Adenoids operations (Hospital Aurist)	355	354
Tonsils and Adenoids operations (Education Authority Aurist)	875	746

Ophthalmic Department.

There were 34 patients seen by the Ophthalmic Surgeon, the total attendances being 56.

Dental Department.

	1945	1944
Patients inspected	2,038	1,127
Patients treated .. .. (in-patients 834, out-patients 25)	859	960
Extractions under general anaesthetic .. (in addition 208 had N2O gas)	56	50
Fillings .. .. (in-patients 224, out-patients 10)	234	171
Special gum treatments .. .. (in-patients 58, out-patients 3)	61	45

Of the total treatments 364 in-patients and 16 out-patients were under the age of 8 years and 470 in-patients and 9 out-patients were over 8 years old.

X-Ray Department.

	1945			1944		
	Total	In-patients	Out-patients	Total	In-patients	Out-patients
Patients radiographed ..	3,599	2,801	798	2,795	2,187	608
Films exposed	6,961	..	..	5,096	..	..

Physiotherapy Department.

	Attendances	In-patients	Out-patients
Ultra Violet Light treatments	5,192	392	151
Massage treatments..	3,646	256	102
Electrical treatments	1,200	111	33

Almoner's Department.

	1945	1944
Out-patient attendances	8,557	6,280
Received in payment :—		
From patients	£79	£76
From hospital funds	£305	£316
Convalescences arranged	240	154
Extra nourishment cases	145	74
Transport and escorts arranged	173	109
Home visits paid by Almoner	140	57
Special schooling arranged	14	35
Referred to other clinics or to district nurses	73	6
Transfers to residential nurseries	89	47
Transfers to day nurseries or foster-mothers	19	7
Referred to statutory or voluntary bodies—		
For supervision or reports	235	37
For help with appliances	16	10
For assistance with clothing	70	20

Nursing Staff.

Student Nurses.

51 new students entered in 1945. 22 nurses left in trial period. 16 nurses left after trial period, but without completing training. 28 nurses completed their training.

State Examination Results.

	Entries	Passes	Failures
Preliminary	27	23	4
Final	28	27	1

Staff Sickness.

During the year 168 nurses were off duty through illness and accident. The total days lost were 1,882.

Co-operation with Other Hospitals.

It is a pleasure to record the help we have received from the Christie Hospital and the Manchester Royal Infirmary (Neuro-Surgical and Thoracic Departments)

CRUMPSALL HOSPITAL.

By Dr. W. A. Ramsay, Medical Superintendent.

STAFF.

(a) *Visiting Consultants*—

C. S. D. Don, M.D., M.R.C.P.	Senior Physician
H. R. J. Donald, B.M., B.CH., M.R.C.P.	Physician
R. W. Luxton, M.D., M.R.C.P.	Physician
F. H. Scotson, M.B., B.S., F.R.C.S.	Surgeon
D. S. Poole Wilson, M.B., M.CH., B.A.O., F.R.C.S.	Surgeon
N. G. Godfrey, M.B., B.S., F.R.C.S.	Surgeon
Mary Evans, M.D., M.R.C.O.G.	Obstetrician and Gynaecologist
M. Gordon, F.R.C.S., D.L.O.	Ear, nose, and throat surgeon
H. O. Clarke, M.B., B.CH., B.A.O., F.R.C.S.I., F.R.C.S.(Eng)	Orthopaedic surgeon
L. Wertheim, M.R.C.S., L.R.C.P.	Dermatologist
T. Milnes Bride, M.D.	Ophthalmologist
A. A. Dunlevy, M.B., B.CH., B.A.O., D.M.R.E.	Radiologist
Gordon Whitehead, M.B., CH.B.	Venereologist
H. J. Brennan, M.D., D.A.	Anaesthetist
Olive M. Gimson, M.B., CH.B.	Anaesthetist
Elizabeth C. Byrd, M.B., CH.B.	Medical Officer to Mothers' Clinic
W. C. Mellor, L.D.S.	Dentist

(b) *Full time.*

W. A. Ramsay, T.D., M.A., M.D.	Medical Superintendent
P. Steiner, M.D. (Vienna)	Deputy Medical Superintendent (temporary)
P. G. Kohnstamm, F.R.C.S.	Resident Surgical Officer
Ursula M. Lister, M.B., B.S., F.R.C.S., M.R.C.O.G.	Resident Obstetrical Officer
Helen E. Barlow, M.B., CH.B.	Resident Anaesthetist
J. K. Bors, M.B., B.S. (Sydney)	Resident Assistant Surgical Officer
A. H. Gibson, M.R.C.S., L.R.C.P.	Resident Assistant Obstetrical Officer
J. B. Donaghy, M.B., CH.B., B.A.O.	Resident Assistant Medical Officer
Marjorie Wright, M.B., CH.B.	Resident Assistant Medical Officer
D. B. Broughton, M.R.C.S., L.R.C.P.	Resident Assistant Medical Officer
E. C. Hutchinson, M.B., CH.B.	Resident Assistant Medical Officer
Lucy M. Dunkerley, M.B., CH.B.	Resident Assistant Medical Officer
C. B. Sherer, M.R.C.S., L.R.C.P.	Resident Assistant Medical Officer
Margaret A. Barber, M.B., CH.B.	Resident Assistant Medical Officer
Eva M. Hillier, S.R.N., S.C.M.	Matron
A. T. Sampson	Secretary-Steward

General.

The end of the year was marked by the return of several members of the consultant staff from military service. The burden of work has thus been greatly eased.

During the past year a total of 13,818 patients were admitted to hospital. Of these, 3,018 were Service patients. At the end of the year there were still 170 beds reserved for E.M.S. purposes. Owing to shortage of nursing and domestic staff, five wards, containing 130 beds, are not in use.

Surgical Department.

The total number of operations in the operation theatre was 3,290. 1,361 operations were performed by the visiting staff. Emergency operations, included above, totalled 488. General classification of operations is as follows :—

Skin and superficial structures	604
Thorax and chest wall	27
Orthopaedic	329
Ductless glands	13
Hernia	258
Abdominal	637
Rectal	103
Genito-urinary	360
Dental (in main theatre)	36
Gynaecological, including Caesarean Section	914
Ear, nose, and throat	128

Consultant Clinics.

The work of these clinics has been well maintained and results in a definite saving of hospital beds, as many investigations can be carried out before admission to hospital.

	New Patients	Attendances
Medical	585	1,095
Surgical	535	1,398
Gynaecological	553	1,352
Dermatological (from 2·8·45)	23	130
Special Departments :—		
Dental	167	435
Ear, nose, and throat	437	1,148
Eye	124	202
Genito-urinary	15	224
Orthopaedic	434	1,249
Diabetic	20	1,137
Surgical follow-up	139	1,159
Occupational therapy	139	2,185
Chiropody	34	95
Our-patient dressings	313	4,506

X-Ray Department.

This department is still working at a great disadvantage owing to lack of accommodation and apparatus, but it is hoped to expand during the coming year. General statistics are as shown :—

In-patients examined	6,677
Out-patients examined	2,169

Special examinations :—

Alimentary tract	770
Renal tract	423
Chest	3,363
Gall bladder	147
General	3,233

Number of films exposed—15,673.

Physiotherapy Department.

There has been difficulty in obtaining the authorised increase in the staff of the department, but it is now at full strength, comprising six full-time physiotherapists and one part-time. The premises are somewhat inadequate for the task, but it is hoped to carry out certain extensions in the near future.

In-patient attendances—	New patients	1,206
	Attendances	28,316
	Treatments	48,144
Out-patients	New patients	1,034
	Attendances	19,975
	Treatments	32,635

The total treatments given represents an increase of 26 per cent. over the figures for last year.

Almoner's Report.

During the year the staff has been augmented by the appointment of three almoners and a full-time clerk. It is now possible to interview all patients, both in the wards and the out-patient department, and by this means many needs have been discovered. An interesting feature of the enlarged department has been much improved co-operation between the medical and nursing staffs and the almoners.

This department is concerned with the innumerable problems of the illegitimate child, whether of the married or the single woman. The period before adoption takes place is often a difficult one and there is need for a suitable home, particularly for patients with an unstable home background. Many patients were discharged to unsatisfactory home conditions because there was no other solution. The illegitimate birth rate in the hospital was just over 11 per cent.

The District Rehabilitation Officer has been very co-operative in interviewing patients and explaining to them the plans which can be put into operation for their benefit. This has often helped to ease the worry a patient has felt about his prospects for employment, and has led to interesting experiments by patients in trying new kinds of work or training.

Convalescent treatment was arranged for 94 patients during the year. 102 surgical appliances have been obtained through approved societies and other agencies. There has been close co-operation between the department and the various army welfare officers and service units in the district, particularly in regard to the problems of compassionate leave and assistance to dependants.

A scheme has been developed whereby all cancer cases are followed up so that a report can be made and their condition noted.

During the year 3 student almoners have completed a part of their training in the department and several university students have had practical training.

5,595 out-patients made 23,050 attendances. Of these, 2,687 were E.M.S. cases. 2,180 ante-natal clinic patients made 7,309 attendances, and 1,260 attendances were made at the gynaecological clinic. £30 14s. 6d. was collected from patients for out-patient treatment. £384 0s. 6d. was charged to hospital contributory funds for out-patient treatment. £109 4s. 6d was collected for surgical appliances.

Casualty Department.

885 accident cases were attended to in the Receiving Ward, some of them being admitted as in-patients.

Nursing Staff.

It would be possible to engage more nurses if there were accommodation for them. It is hoped that something may be done to meet this during the coming year by the provision of accommodation for 50 additional nurses. The hospital has been fortunate in maintaining the full establishment of trained staff, both sisters and staff nurses. Examination results for the year are shown below :—

	Entered	*Passed*
Hospital Final Examination	60 nurses	52
State Final Examination	66 ,,	63
State Preliminary Examination, Part I	55 ,,	44
,, ,, Part II	49 ,,	47
Central Midwives' Board Examination, Part I	46 ,,	39

Domestic Staff.

As in other hospitals, the problem of recruiting domestic staff has been prominent. The difficulty has been partially solved by the employment of part-time workers in the wards and departments, but there is great need for more resident domestic workers. Ward orderlies are now being recruited, but it remains to be seen whether the right type of woman will be attracted.

Structural Alterations and New Equipment.

A hut has been erected as a canteen for out-patients attending the hospital. An additional treatment room has been provided in the Physiotherapy Department. A dark room in the X-ray Department has been enlarged and re-designed. Central heating is being installed in the nurses' bedrooms in the Limbert Home. A new dental X-ray plant has been purchased.

Publication.

"Pneumococcal lobar pneumonia treated with sulphamezathine."—
Ramsay, W. A., Luxton, R. W.,
Steiner, P., and Smith, G. S.
Lancet, 20th January, 1945, p. 78.

Maternity Department.

During the year 2,377 women were treated in the Maternity Department. Of these, 2,170 were booked cases (*i.e.*, had attended the hospital ante-natal clinic) and 207 were emergency cases.

The booked cases comprised the following :—

	Primipara	Multipara	Total
Patients delivered at or near term	1,266	888	2,154
*Patients delivered before the 28th week	5	0	5
Patients admitted after delivery	1	9	10
Died undelivered	0	1	1
	1,272	898	2,170

The emergency cases comprised the following :—

	Primipara	Multipara	Total
Patients delivered at or near term	57	111	168
*Patients delivered before the 28th week	2	2	4
Patients admitted after delivery	9	26	35
	68	139	207

* The majority of the abortions are treated in the gynaecological wards.

Maternal Mortality.

There were 5 deaths among the patients treated in the department. Of these, 3 were in booked cases and 2 in emergency cases.

(A) *Booked Cases*—

1. Obstetric shock following post-partum haemorrhage.
2. Obstetric shock in a para. 10, aged 49, following a prolonged and difficult labour.
3. Sudden death in early labour. Port-mortem failed to show any cause for the death.

(B) *Emergency Cases.*

1. Pulmonary embolism and paralytic ileus following Caesarean section for central placenta praevia.
2. Eclampsia.

Total number of births (live and still) = 2,364, giving a maternal mortality rate of 2·1 per thousand births.

Maternal Morbidity.

Morbidity is reckoned according to the Ministry of Health standard. By that standard 12 cases were morbid in addition to the 5 deaths, making a total of 17. The maternal morbidity rate was, therefore, 7·2 per 1,000 births.

Summary of Abnormal Labour.

Abnormal Presentations.		*No. of Cases*
Persistent or incompletely rotated occipito-posterior		72
Breech		88
Face		12
Shoulder		15
Twins		44

Complications.		
Ante-partum haemorrhage	(*a*) placenta praevia	12
	(*b*) accidental	25
Post-Partum haemorrhage		77
Prolapse of cord		10
Eclampsia		5
Cardiac disease		38
Carcinoma of cervix		1

Operations Performed—		
Caesarean Section	(*a*) Lower segment	46
	(*b*) Upper segment	17
Forceps		133
Craniotomy		1
Version under anaesthesia	(*a*) external	26
	(*b*) internal	9
Induction of labour	(*a*) medicinal	4
	(*b*) bougie	4
	(*c*) combined medicinal and A.R.M.	51
Therapeutic abortion		2
Manual removal of placenta		21

Blood and Plasma Transfusions—	
Blood	30
Blood and plasma	3
Plasma	8

In-Patient Ante-Natal Treatment.

During the year 364 patients were admitted to the ante-natal ward for treatment. The chief conditions for which this was done are given below.

	No. of Cases
Toxaemia	90
Hypertension	89
Urinary infection	22
Cardiac disease	24
Diabetes	3
Other conditions	136
	364

Infants' Report.

Premature Infants.

201 of the infants born alive were premature, *i.e.*, weighed 5½ lbs. or under. Of these 54 died in hospital.

		Booked	Emergency	
Stillbirths	Full term	29	10	
	Premature	30	26	
	Total			95
Neo-natal Deaths	Full term	22	7	
	Premature	24	30	
	Total			83

The premature babies are now all fed on breast milk. Many of the wards are able to supply their own. From August 1st to December 31st, 1945, the Department supplied :—

102 pints 11 ozs. to Booth Hall Hospital.
61 pints 15 ozs. to Manchester Children's Hospital, Pendlebury.
37 pints 7 ozs. to Crumpsall Hospital.

LANGHO COLONY.

By Dr. Beresford T. Richards, Medical Superintendent.

STAFF.

Full time—

Beresford T. Richards, M.R.C.S., L.R.C.P., D.P.M.	Medical Superintendent
Mrs. A. J. Green, R.M.P.A.	Matron
H. H. Miller, M.B.E.	Secretary-Steward

On 31st December, 1945, there were maintained in the Colony 269 male and 317 female colonists, of whom 297 were chargeable to the Manchester Corporation and 289 to other authorities, as under :—

County Boroughs.		*County Councils, etc.*	
Blackburn	21	Cheshire	6
Bolton	9	Durham	1
Bootle	3	East Sussex	1
Blackpool	6	East Suffolk	3
Burnley	9	Glamorgan	3
Bradford	1	Lancashire	133
Barrow-in-Furness	2	Middlesex	4
Chester	1	Monmouth	1
Croydon	2	North Riding	1
Ipswich	4	Surrey	5
Liverpool	19	West Riding	11
Newcastle	1	West Sussex	1
Oldham	4	States of Guernsey	1
Preston	4		
Salford	26		171
Warrington	4		
Wallasey	1		
Wigan	1	Total :	289
	118		

The total number of seizures during the year was 33,438.

	Severe	Slight	Total	Average	Total Number Maintained
Male	10,904	5,803	16,707	62	269
Female	7,171	9,560	16,731	52	317
Total	18,685	15,363	33,438	57	586

The following classification of the incidence of seizures is interesting :—

	Males	Females
Decreased incidence	52	21
Increased incidence	44	43
No change	134	211
No seizures during the year	40	38
Unclassified (including recent admissions and non-epileptics)	20	—

21 colonists died during the year.

There were 11 fractures during the year.

The employment of colonists on the 31st December was as follows :—

	Males	Females
Domestics—The Homes	107	130
,, ,, Light Work	14	—
,, —The Administrative Block	8	27
Canteen	—	—
Tailor's Shop	1	—
Shoemaking	2	—
Engineering	3	—
General Stores	6	—
General Kitchen	1	17
Laundry	2	36
Medical Superintendent's Garden	3	—
Farms	18	—
Kitchen Garden	7	—
Grounds and Coal Yard	68	—
Clerk of Works	4	—
Sewing Room	—	34
Sick and unemployable	25	73
	269	317

MONSALL HOSPITAL.

By Dr. D. C. Liddle, Medical Superintendent.

STAFF.

(a) *Visiting Consultants.*

E. S. Burt Hamilton, M.C., M.B., CH.B., F.R.C.S.	Ear, nose, and throat surgeon
W. Bryce McKelvie, M.D., CH.M., F.R.C.S., D.L.O.	Ear, nose, and throat surgeon
J. White, M.B., CH.B., D.M.R.E.	Radiologist

(b) *Full time—*

D. C. Liddle, M.B., CH.B.	Medical Superintendent
W. Sharpe, M.B., CH.B., D.P.H.	Deputy Medical Superintendent
H. Tabbush, M.B., CH.B.	Resident Assistant Medical Officer
R. L. Dreifuss, M.R.C.S., L.R.C.P.	Resident Assistant Medical Officer
Janet B. C. Orchardson, M.B.E., A.R.R.C., S.R.N.	Matron
C. Johnson	Secretary-Steward

General.

At the close of the year 1944, 234 patients remained in hospital. During the year 2,751 were admitted. The total number under treatment during the year was 2,985. There were 49 deaths and 2,803 were discharged cured ; 133 remained in hospital at the end of the year.

The largest total number of cases admitted to hospital was during the month of October, when 323 cases were received. The maximum number of patients in hospital was 252 on October 26th and the minimum number was 125 on December 31st.

The average daily number of patients in hospital for the year was 189·3, as against 265·5 in the year 1944.

The average duration of stay for each patient was 25·1 days, as against 27·1 in 1944.

The fatality rate for all cases under treatment was 1·7 per cent. as compared with 2·3 during 1944.

In 589 cases, or 20·6 per cent., the diagnosis was altered from the disease notified.

Scarlet Fever.

105 cases remained in hospital at the end of the previous year, and during the year 823 were admitted, showing a decrease of 497 on the previous year. The number of discharges was 907 and there were no deaths.

The average stay in hospital was 25·8 days, showing a decrease of 2·8 days in the previous year.

Complications in Scarlet Fever.

Complication	Number	Percentage
Rhinorrhoea in Convalescence	4	0·4
Otorrhoea	39	4·3
Nephritis	1	0·1
Albuminuria in Convalescence	1	0·1
Adenitis	14	1·5

Active Immunization against diphtheria in patients admitted to Hospital suffering from Scarlet Fever.

Patients who were Schick positive were immunized against diphtheria.

Scarlet Fever Return Cases.

The number of cases of scarlet fever discharged from hospital during the year was 907. The number of true return cases for the year was 7, the return case rate being 0·8 per cent., as against 1·75 for 1944.

The average duration of stay in hospital of cases giving rise to secondary cases was 23 days. The average interval elapsing between the discharge of the primary case from hospital and the onset of the disease in the secondary case was 11·1 days.

Monthly Table.

1945	Discharges	Return Cases	Percentage
January	97	2	2·1
February	60	—	—
March	78	1	1·3
April	86	—	—
May	80	—	—
June	63	—	—
July	68	1	1·5
August	74	—	—
September	53	—	—
October	98	1	1·02
November	109	1	0·9
December	41	1	2·4
Total	907	7	0·8

Minimum—0·9 per cent. in November.
Maximum—2·4 per cent. in December.

Diphtheria.

The number of patients admitted with diphtheria was 418 as against 398 in 1944, showing an increase of 20. The total number under treatment was 478. There were 404 discharges and 12 deaths; 3 deaths occurred within 48 hours of admission. The gross fatality rate was 2·9 per cent., as against 1·8 during the previous year, or 2·2 excluding the 3 deaths referred to. None of the deaths occurred in immunized patients.

50 cases out of the total were diagnosed as diphtheria carriers; excluding these carrier cases the fatality rate is 3·3 per cent.

The average stay in hospital of the patients who recovered was 36·6 days and for fatal cases 13·5 days.

252 cases certified diphtheria were found to be suffering from some other disease: none of these cases proved fatal.

Laryngeal Diphtheria.

5 cases of laryngeal diphtheria were admitted during the year. Two cases required tracheotomy and both cases recovered.

Diphtheria Cases—366

(excluding 50 carriers).

Age Incidence	Number	Percentage	Percentage of Deaths
0—5 years	46	12·6	2·2
5—10 ,, ...	133	36·3	7·5
10—15 ,, ...	89	24·3	—
15—20 ,, ...	30	8·2	—
20+ ,, ...	68	18·6	1·5

Complications in Diphtheria.

	Number	Percentage
Palatal paresis	10	2·7
Palatal, pharyngeal, diaphragmatic paresis, and strabismus	3	0·8
Palatal and paresis of accommodation	3	0·8
Palatal, facial, pharyngeal, muscular paresis, and cycloplegia	2	0·5
Palatal, pharyngeal, and respiratory paresis	1	0·3
Palatal and pharyngeal paresis, dimness of vision, and sluggish diaphragm	1	0·3
Palatal and facial paresis	1	0·3
Respiratory paresis	1	0·3
Ocular paresis	4	1·1

Enteric Fever Group.

In hospital at commencement of year	3
Admitted during the year	10
Incorrectly diagnosed	4
Remaining in hospital at end of year	—
Discharged	8
Died	1*
Average day of disease on admission	4th
Average stay in hospital	53 days
Average age of patients	18 years

The type of disease in the cases diagnosed as enteric fever was :—

Typhoid	8 cases
Paratyphiod B	1 case

* This death was due to senile myocardial degeneration.

Erysipelas.

69 cases were admitted and 65 were discharged. There was 1 death, due to myocarditis and hyperpiesis.

There were 22 cases notified as erysipelas in which the original diagnosis had to be amended. The following is a list of the conditions in which an alteration of the diagnosis was made :—

Cellulitis	9
Mastitis	1
Tonsillitis	1
Urticaria	1
Varicose ulceration of leg	1
Prepatellar bursitis	1
Herpes frontalis	1
Diabetic gangrene of scrotum	1
Other skin conditions	6

Measles.

145 cases of measles were admitted during the year 1945 and 162 were discharged. 2 deaths occurred, giving a mortality rate of 1·2 per cent. 13 cases were complicated by broncho-pneumonia. 1 death was due to this cause and 1 to broncho-pneumonia in haemorrhagic measles.

Whooping Cough.

97 cases of whooping cough were admitted during 1945 as against 141 in the previous year. There were 88 discharges and 11 deaths, giving a death rate of 11·1 per cent. as against 9·8 in 1944.

The cause of death in the fatal cases was as follows :—

	Cases
Broncho-pneumonia	4
Broncho-pneumonia and Coeliac disease	1
Broncho-pneumonia and gastro-enteritis	1
Convulsions	2
Tuberculous meningitis	1
Miliary tuberculosis	1
Late intussusception, diarrhoea, and vomiting	1

Cerebro-Spinal Fever.

31 cases of meningococcal meningitis were treated during the year. 28 cases recovered and 3 died, 2 within 48 hours of admission. The fatality rate was 9·7 per cent.

	Total Cases	Male	Female	Died	Recovered	Case Mortality per cent	
						Total	Excluding Deaths in 48 hours
Under 1 year	5	5	—	—	5	—	—
1 to 5 years	5	2	3	1	4	20·0	20·0
5 ,, 10 ,, ...	2	2	—	1	1	50·0	—
10 ,, 20 ,, ...	7	5	2	—	7	—	—
20 and over	12	7	5	1	11	8·3	—
	31	21	10	3	28	9·7	3·5

Average day of disease on admission to hospital :—
Recoveries—Fourth.
Deaths—Third.

Table showing Numbers of Various Diseases Treated.

	Remaining in hospital, 1st January, 1945.	Admitted	Discharges and deaths	Remaining in hospital, 31st December, 1945
Scarlatina	105	823	907	21
Diphtheria and Diphtheria Carriers	60	418	416	62
Enteric Fever Group	3	6	9	—
Erysipelas	1	69	66	4
Puerperal Fever and Pyrexia ..	10	140	139	11
Measles	20	145	164	1
Whooping Cough	11	97	99	9
Other Diseases	24	1,053	1,052	25
Total	234	2,751	2,852	133

Post-Mortem Examinations.

During the year 20 post-mortem examinations were performed.

Aural Report.

The total number of cases of otitis media treated in the hospital during 1945 was 85; many of these were suffering from this condition on admission.

Distribution of Cases of Otitis Media.

	Total	Unilateral	Bilateral
Scarlet Fever	39	27	12
Diphtheria	7	4	3
Measles	8	2	6
Whooping Cough, Chickenpox, and Miscellaneous ..	31	15	16
	85	48	37

One mastoidectomy was performed.

Laboratory Report.

Microscopical Examination of Cultures for C. Diphtheriae.

Source of Swab	Loeffler Culture Media		Tellurite Culture Media	
	Number Examined	Positive	Number Examined	Positive
Throat	6,540	667	320	134
Nose	6,483	240	267	97
Ears	86	19	14	9
Miscellaneous	12	—	—	—
	13,121	926	601	240

A list is appended of the various specimens examined in the laboratory :—

Faeces	2,904
Urine—	
Microscopical examination	113
Cultural examination	322
Chemical examination	138
Cerebro-spinal fluid—	
Microscopical examination	131
Cultural examination	156
Chemical	82
Pus—	
Microscopical examination	33
Cultural examination	33
Sputum	26
Cervical swabs	10
Vaginal swabs	170
Blood cultures	96
Blood counts	185
Agglutinations	30
Direct smears	90
Throat swabs (for haemolytic streptococci)	424
Effusions	12
Miscellaneous	68
Total	5,023

Cultures examined	14,888
Specimens examined	5,023
Total	19,911

Puerperal Unit.

At the beginning of the year 10 patients were still under treatment in the puerperal unit. During the year 140 patients were admitted for treatment of abnormal conditions arising in the puerperium or in association with abortion. 138 patients were discharged and one death occurred during the year. The mortality rate was 0·75 per cent. as against 2·6 per cent. during the previous year.

Of the 139 patients discharged or died during the year the incidence of the various types of disease is shown in the following table :—

Puerperal sepsis	59
Puerperal pyrexia	21
Septic abortion	27
Incomplete abortion	17
Simple abortion	5
Threatened abortion	6
Inevitable abortion	2
Pelvic peritonitis	1
Malignant disease of uterus (admitted as Septic Abortion)	1

In the 59 cases of Puerperal sepsis the following complications were present :—

Phlegmasia alba dolens	13
Pulmonary embolism	6
Pelvic abscess	6
Ovarian abscess	1
Pelvic cullulitis	2
Pelvic haematocele	1
Generalised peritonitis	1
Urethro-vaginal fistula	1
Puerperal mania	1
Mastitis	6
Subacute bacterial endocarditis	1
Retinal haemorrhage	1
Pyelitis	1
Cystitis	1

Four patients required a general anaesthetic for manual removal of retained placental tissue.

The following operations under a general anaesthetic were performed :—

Incision and drainage for breast abscesses	6
Posterior colpotomy for pelvic abscess	1
Laparotomy and drainage—Generalised peritonitis	1

(This case provided the only death during the year.)

Puerperal Pyrexia.

The following table shows the cause of pyrexia in the 21 cases of Puerperal Pyrexia admitted :—

Mastitis	16
Pulmonary Tuberculosis	1
Influenza	1
Cellulitis of head	1
Fibrositis	1
Tonsillitis	1

Septic Abortion.

In the 27 cases suffering from Septic Abortion, the following complications occurred :—

Pulmonary embolism	3
Pelvic abscess	3
Pelvic Peritonitis	2
Jaundice (Toxic)	2
Pyosalpinx	1
Salpingitis	1
Rupture of uterus and gas gangrene	1
Sub-diaphragmatic abscess	1
Phlegmasia alba dolens	1

6 patients had a general anaesthetic and digital removal of retained products of conception.

Incomplete Abortion.

Of the 17 patients suffering from this condition, 15 had digital removal performed for retained products, 10 requiring a general anaesthetic

Penicillin.

21 patients suffering from puerperal infection and 7 patients with abortal infections had Penicillin therapy; in all but 1 case with good effect.

Immunisation of Nursing Staff.

46 members of the nursing staff were Schick tested and 46 were Dick tested. Of these 13 were Schick positive and 9 were Dick positive and were immunised against diphtheria and scarlet fever respectively.

One nurse, who was Dick positive, developed scarlet fever.

Two nurses developed diphtheria ; both were Schick negative.

Three nurses developed other infectious diseases.

WITHINGTON HOSPITAL.

By Dr. J. M. Greenwood, Medical Superintendent.

STAFF.

(a) *Visiting Consultants*—

A. Hillyard Holmes, M.D., F.R.C.P.	Senior Physician
R. Ellis, M.D., F.R.C.P.	Physician
M. L. Thomson, M.A., M.D., M.R.C.P.	Physician
H. T. Simmons, M.D., CH.M., F.R.C.S.	Surgeon
H. T. Cox, M.A., M.D., F.R.C.S.	Surgeon
E. A. Gerrard, M.D., M.R.C.O.G.	Senior gynaecologist and obstetrician
R. Newton, M.D., M.R.C.O.G.	Gynaecologist and obstetrician
N. A. J. Young, M.B., CH.B., F.R.C.S.	Ear, nose, and throat surgeon
E. S. Brentnall, M.B., CH.B., F.R.C.S.	Orthopaedic surgeon
Judith E. M. Savatard, M.B., B.S.	Dermatologist
O. M. Duthie, M.D.	Ophthalmologist
H. M. Morris, M.D	Radiologist
A. A. Dunlevy, M.B., B.CH., B.A.O.	Radiologist
C. E. Sykes, M.B., CH.B., D.A.	Anaesthetist
Rose E. Williams, M.R.C.S., L.R.C.P., D.A.	Anaesthetist
H. J. A. Simmons, M.B., CH.B., D.A.	Anaesthetist
Douglas Wain, O.B.E., L.D.S.	Dentist

(b) *Full time.*

J. M. Greenwood, M.D., D.P.H.	Medical Superintendent
B. Wolman, M.B., CH.B.	Deputy Medical Superintendent
T. H. Shaw, M.B., B.CH., B.A.O.	Senior Assistant Pathologist
M. A. Goodwin, M.B., CH.B.	Resident Surgical Officer
M. H. Calverley, M.B., CH.B., D.R.C.O.G.	Resident Obstetrical Officer
H. E. Bach, M.D. (Vienna)	Resident Assistant Surgical Officer
D. D. O'Sullivan, M.B., B.CH., B.A.O.	Resident Assistant Medical Officer (Tuberculosis Wards)
D. McKinnon, M.B., CH.B.	Resident Assistant Medical Officer
Alice R. E. Widdows, M.B., CH.B.	Resident Assistant Medical Officer
T. Mooney, M.B., CH.B.	Resident Assistant Medical Officer
K. Lowe, M.B., CH.B.	Resident Assistant Medical Officer
Kathleen P. E. Mumford, M.B., CH.B.	Resident Assistant Medical Officer
Kathleen V. Lodge, M.B., CH.B.	Resident Assistant Medical Officer
Jessie Rhodes, S.R.N.	Matron
E. F. Barber	Secretary-Steward and Master, Withington Institution

General.

The year brought a change in the classification of patients admitted as the number of military casualties decreased and beds became available for civilian purposes. Shortage of nurses meant that some acute beds in the hospital had to be closed, and towards the end of the year 250 beds were closed for this reason. An endeavour was made to ease this situation by increasing the amount of out-patient work throughout the departments where this was possible, and the report will show that considerable work was done in this way in spite of the fact that out-patient buildings were not available.

The total admissions during the year were 10,649, of whom 1,102 were military.

The chief work in regard to building was the modernisation of the sanitary accommodation for patients in Pavilion 9 and the provision of a waiting-room and changing cubicles in the X-ray department. Work was started in laying an A.C. electric cable and on enlargement of the Pathological Laboratory. A new mobile X-ray plant and an electrocardiagraph were purchased.

Medical Department.

Restricted nursing staff meant the closure of medical beds and, on the whole, this department suffered more severely than other sections of the hospital. The closure of some beds in the Institution, where the chronic sick are nursed, meant restricted transfer from the hospital, with the consequent blocking of acute beds.

In the tuberculosis wards one ward remained closed for men during the year and towards the end of the year the number of female beds had to be reduced from 54 to 32. The type of patient nursed is of a more severe degree than would be the case if unrestricted admission were permitted, as obviously the more sick cases are given priority of admission. For this reason the number of patients using the occupational therapy unit fell at the beginning of the year to about six patients. It was decided this latter department could be used more advantageously for service patients, and from July to the end of the year this was done. 17 men suffering from pulmonary tuberculosis used the department during the first half of the year and 47 service men during the latter half of the year.

Surgical Department.

The work of this section was influenced by military casualties, but not to the same degree as in the previous year. There was a total of 3,127 operations performed, of which 2,600 were of a major character. Of the total operations 414 were on service patients, so that the number of civilian operations for the year was 2,713, as compared with 2,767 for 1944.

Analysis of Operations.

	1945		1944	
	Total	Civilians	Total	Civilians
General Surgery	1,474	1,378	1,675	1,387
Orthopaedic Surgery	528	220	737	210
Gynaecological	682	675	750	750
Ear, Nose, and Throat	82	79	103	97
Midwifery	57	57	54	54
Accidents	304	304	269	269
Total	3,127	2,713	3,588	2,767

Accident Department.

4,864 new cases were seen in the department and these patients attended on 9,264 occasions. 392 patients required admission to hospital; and the total number of operations performed in the department was 304. The department in use as an accident unit is combined with the admission unit, thus saving some staff. Additional accommodation for out-patients is urgently needed.

The original accident department was used as a consultation clinic for medicine, surgery, and gynaecology, and as an ante-natal department.

Obstetric Department.

This department worked to the full capacity of available nursing staff—but shortage of staff meant that many patients had to be refused admission. Urgency cases, mothers having a first baby, or having had more than 4 babies, had priority, together with mothers who might have complications. The home conditions of the remaining mothers were considered, and the available beds remaining were filled to capacity. Patients are discharged on the tenth day after delivery.

Patients admitted to hospital—

(1) For ante-natal treatment—	
(*a*) From the clinic	622
(*b*) Emergencies	65
Total	687
(2) For delivery—	
(*a*) From the clinic	1,811
(*b*) Emergencies	140
(*c*) Immediately after delivery	36
Total	1,951

Patients who attended the clinics :—

(1) Ante-natal—
Sessions—249 : Attendances—11,264.

(2) Post-natal—
Sessions— 52 : Attendances— 1,068.

Mothers.

Medical aid sought during delivery on 764 occasions.

The following procedures were carried out :—

Repair of the perineum	474
Instrumental delivery	107
Surgical induction of labour	101
Breech delivery	59
Caesarean section	58
Twin delivery	40
External version	32
Blood transfusion	24
Manual removal of placenta	17
Internal version	11
Transverse lie	10

There were two maternal deaths—one occurred in the department in a mother admitted as an urgency, and the other died in the tuberculosis ward from that disease.

There were 42 notified cases of Puerperal Pyrexia.

Babies.

The total number of babies born was (including 40 twins)		1,991
Premature babies born alive		175
Stillbirths—		
(*a*) Full time	38	
(*b*) Premature	33	
	—	71
Died under 10 days—		
(1) In premature babies		26
(2) Full term babies		15
Died over 10 days		10
Blood transfusions given to babies		8
Ophthalmia Neonatorum		2
Discharged from hospital—		
(*a*) Wholly breast fed		1,724
(*b*) Partially breast fed		102
(*c*) Artificially fed		43
Live babies discharged		1,869
Percentage—totally breast fed		96

Physiotherapy Department.

The department is housed in a converted ward which was established as a temporary measure more than 15 years ago. During this time the work has increased very considerably and additional staff obtained, so that now the department is totally inadequate for modern needs. Ward exercises are undertaken by the staff, whereby groups of patients are treated together. The number of staff available was greater than the previous year and more work was done, but the number of staff and lack of accommodation limits the amount of treatment which should be given.

The following table shows the work done in the department :—

	Attendances			Treatments		
	In-Patient	Out-Patient	Total	In-Patient	Out-Patient	Total
1945 ..	12,187	24,806	36,993	20,360	31,406	51,766
1944 ..	11,192	20,413	31,605	16,787	22,462	39,249

There were 1,822 new out-patients who attended for treatment and 931 in-patients. Classes met on 457 occasions and the total number of patients attending reached 4,752. Ward drill was given in addition.

X-Ray Department.

The number of examinations in this department was less than the previous year on account of the decrease in acute military orthopaedic work. Out-patient examinations were 5,685 and in-patient examinations 3,462. These figures show the tendency to increase out-patient work as far as medical staff and buildings permit, thereby relieving in-patient demands.

The following table shows an analysis of examinations carried out during the year :—

Barium meals	676
Barium enemas	208
Chests	1,820
Excretory pyelograms	238
Cholecystograms	119
Renals	160
Bones, joints, etc.	5,926
Total	9,147

Consultation Clinic.

The department was very active and the work was only limited by lack of medical staff and accommodation, as there is a great demand for increased facilities. It is through this department that waiting lists are largely compiled and admissions regulated so that the least possible delay occurs in treatment after the patient is admitted to hospital.

Patients seen during the year numbered 1,977 and attended clinics as follows :—

General medicine	296
General surgery	843
Gynaecology	559
Orthopaedics	279

Almoners' Department.

This department now has three almoners and one clerk. The work is stressed as being social service and was limited only by the available number of staff, who are not adequate in number to see to all patients, which is the ultimate goal.

The number of unmarried mothers who needed help increased considerably and one almoner was employed full time in the Maternity department.

Out-patient attendances numbered 24,200, as compared with 23,573 in the previous year.

The following table gives some idea of the scope and activities of this department during the year.

Convalescent treatment arranged for	98	patients
Unmarried mothers assisted	217	
Mothers with illegitimate babies	84	
Rehabilitation and occupational therapy	31	patients
Surgical appliances, spectacles, etc	133	
Home visits—paid by almoner	52	
Care of children—families assisted	50	

Other help, such as arranging for transport of patients to and from hospital, making arrangements for extra diet, clothing, compassionate leave, advice in regard to rent, pensions, etc., was given.

The receipts for the year totalled nearly £1,694, which was obtained from the following sources :—

	£
Grants for hospital funds	1,007
Out-patient donations	540
Surgical appliances	106
Motor accidents and others	41
	£1,694

Staff.

The number of resident medical staff was maintained and the year saw a return of a number of visiting part-time specialists.

The health of the nursing staff received considerable attention. The total attendances of staff in the surgery of the Nurses' Home was 1,398, which figure includes 197 examinations as part of a general review of health. There were 94 nurses admitted to the sick wards during the year and 59 treated in the sick bay of the Nurses' Home.

Some figures in regard to nursing training were of interest in that during the year 467 enquiries were made and application forms sent out. Of this number 121 were accepted, 128 rejected, 8 were still under consideration at the end of the year, 34 were withdrawn, and 176 did not reply.

PARK HOUSE, CRUMPSALL.

By F. O. Schofield, Master.

STAFF.

Full time—

W. A. Ramsay, T.D., M.A., M.D.	Medical Officer
F. Latham, M.B., CH.B., B.SC.	Resident Assistant Medical Officer (Mental Wards)
F. O. Schofield	Master
Lily Ford, S.R.N., S.C.M.	Matron

During the year under review the chief problem has been the acute shortage of nursing, domestic, and other staff. At times it seemed that steps would have to be taken to close some wards. The laundry also has been very understaffed.

730 patients (294 males and 436 females) have been admitted into the mental wards, as compared with 748 in the previous year. Recreational facilities have been well maintained for the patients, and a great number have gained benefit from the occupational centre which holds classes daily. The work done is utilised in brightening the wards and dormitories.

The nursing of sick inmates who require hospital treatment is still being carried out in the Institution, and a number of chronic sick patients from the adjoining Crumpsall Hospital are also being nursed.

Old and infirm persons admitted during the year numbered 402, a decrease of 190 compared with last year. The dietary for these old people has been very much improved and the food supplied is good and plentiful.

There are still a number of evacuees in the Institution from Great Yarmouth, London, and Salford.

The health of the patients and inmates has been good.

WITHINGTON INSTITUTION.

By Ernest F. Barber, Master.

STAFF.

Full time—

J. M. Greenwood, M.D., D.P.H.	Medical Officer
Ernest F. Barber	Master
Catherine Roberston, S.R.N.	Matron

The premises at the end of the year were utilised as follows :—

	Beds	Patients	
FOR CHRONIC SICK.			
Females—			
3 Pavilions (7 wards occupied)	306	303	
1 ward partly occupied	34	5	(sleeping only)
1 ward closed	43	—	
2 Infirm wards	68	68	
Males—			
2 Pavilions (5 wards occupied)	241	217	
Extra beds	3		
1 ward closed	42	—	
	737	593	
FOR AMBULANT PATIENTS.			
1 Pavilion for males	106	81	
Totals	843	674	

Not in use and due for reorganisation under the Five-Year Plan.

2 Pavilions .. .. 202 beds

" A " Home is waiting for the sanction of the Ministry of Health to proceed with the alterations necessary to convert it for staff accommodation.

The Staff Home is used as staff residential quarters, kitchens, dining rooms, etc.

During the year there has been no change of policy in the use of the Institution and the major part continues to be occupied by chronic sick patients—one block only being reserved for ambulant male patients. On 31st December the patients numbered 593 males and 81 females.

Waiting List.

Owing to the continued shortage of nursing staff a waiting list has, unfortunately, operated and in most cases long periods have elapsed before admissions could be arranged. At the end of the year there were 11 males and 96 females on the list.

Evacuees.

The year commenced with 55 evacuees in the Institution and ended with 9. 5 were admitted, making a total of 60 for the year. The difference is made up as follows :—

Transferred to London	20	51
Transferred to Folkestone	1	
Transferred to Didsbury Lodge	14	
Transferred to other places, including hospital wards (3)	5	
Died	11	

The nurses transferred from the London County Council, to help to deal with the evacuees, have all returned to London.

Deaths.

The following are the age groups of the 313 persons dying in the Institution :—

Under 60 years old	12
Between the ages of 60 and 70 years	50
,, ,, 70 and 80 years	159
,, ,, 80 and 90 years	89
Over 90 years old	3

SWINTON HOME.

By W. T. Williams, Secretary-Steward.

STAFF.

(a) *Full time*—

W. T. Williams	Secretary-Steward.
Elsie Williams, R.M.P.A.	Matron.

(b) *Part time*—

J. H. Moore, M.B., CH.B.	Visiting Medical Officer

This Home for mentally defective children contains 130 beds which are kept almost continuously full ; in fact, the average number of beds occupied during the year was 123.

The general behaviour and conduct of the patients has been satisfactory, there being no report of any serious misdemeanour.

All patients who are teachable receive training in the school attached to the Home. The school is adequately staffed by trained teachers and is organised in Senior, Preparatory, and Nursery classes, while those children who do not reach this standard are taken in special classes held in the Home. Instruction is given in social behaviour, physical training, handicraft, and gardening. Every child is given an individual intelligence test by the Binet-Simon method and placed in one of the four classes, according to their mental age.

The children are taken individually and in groups to the local cinemas and theatres many times during the year, especially at holiday times. In summer they were taken by bus to the sea-side for the day, whilst at Christmas time large parties were taken to see pantomimes on four consecutive weeks. Short holidays with their parents are encouraged and small groups of children are taken out frequently to tea at the homes of various nurses. Parties of entertainers have visited the Home and given concerts.

The health of the patients has been most satisfactory. All cases of acute illness have been promptly recognised and treated.

ROSE HILL CONVALESCENT HOME, NORTHENDEN.

By A. Hartley, Secretary-Steward.

Staff.

(*a*) *Full time*—

A. Hartley	Secretary-Steward.
Ada M. Matthews, S.R.N., S.C.M.	Matron.

(*b*) *Part time*—

P. Moran, M.D.	Visiting Medical Officer.

In 1945, 175 persons were admitted and 187 discharged; included in these were 29 mothers and new born babies. 25 babies were subsequently adopted.

The average number of beds occupied was 35, a rather low figure, due mainly to shortage of staff and the occurrence of infections. During the year 123 patients were transferred to hospitals for treatment of the following conditions:—

Dysentery	40	Bronchitis	12
Measles	20	Impetigo	9
Chickenpox	3	Ophthalmia	6
Aural complaints	13	Tonsillitis	6
Scabies	4	Diphtheria	1
Marasmus	2	Dermatitis	3
Stomatitis	1	Enteritis	3

Pathological specimens sent to the Public Health Laboratory for examination were as follows:—

Faeces	117	patients and 15 staff
Nasal swabs	30	,,
Throat swabs	6	,,
Ear swabs	3	,,
Vaginal swabs	2	,,
Ocular swabs	1	,,

CONVALESCENT HOMES.

Patients in convalescent homes, January 1st		140
Patients admitted January 1st to December 31st—		
Adults	47	
Children	521	
		568
Patients discharged January 1st to December 31st—		
Adults	47	
Children	539	
		586
Remaining in convalescent homes December 31st—		
Adults	3	
Children	119	
		122

Recommendations for adult patients to receive convalescent treatment were received from the Senior Tuberculosis Officer, the District Medical Officers, Crumpsall Hospital, and Withington Hospital. The children's recommendations were received from the Senior Tuberculosis Officer, the School Medical Officer, Child Welfare doctors, Booth Hall Hospital, the Duchess of York Hospital for Babies, St. Mary's Hospital, and the Invalid Children's Aid Association.

For various reasons 8 adult and 134 children's recommendations were cancelled. Particulars of these cancellations are as follows :—

Adults—		*Children*—	
By patient	5	By parents	30
By doctor (patient unfit to travel)	2	By School Medical Officer	51
Patient too old (age limit 70)	1	By Child Welfare doctor	3
		Parents did not keep appointments	50
	8		134

40 of the 51 cancellations by the School Medical Officer were owing to the fact that the children were no longer in need of convalescent treatment when a vacancy occurred.

Dr. GARRETT MEMORIAL HOME.

By H. Fisher, Secretary-Steward.

Staff.

Full time—

H. Fisher	Secretary-Steward.
F. Ray, S.R.N., S.C.M.	Matron.

On 1st January, 113 children were in residence.

The total number of admissions during the year was 381, a decrease of 19 as compared with the previous year.

Discharges numbered 419. 1 death occurred.

The number remaining on 31st December was 74, a decrease of 39 as compared with the same date in the year 1944.

The number of children admitted each fortnight had to be reduced from 22 to 14 owing to the shortage of staff, hence the low number of children remaining at the end of the year.

The following is a summary of the diagnosis prior to admission:—

Debility	176
Diseases of respiratory system	76
Anaemia	34
Rheumatic and cardiac disease	27
Chorea	12
Miscellaneous	56

Of the 419 children discharged, 384 were marked "fit," 23 "improved," and 12 required further hospital treatment. 408 gained weight, 1 lost weight, and 10 remained stationary.

During residence approximately 380 children received nursing treatment for the following:—

Bronchiectasis	1	Conjunctivitis	9
Chickenpox	32	Eczema	2
Lobar pneumonia	5	Recurrent blepharitis	5
Coryza	19	Nocturnal enuresis	5
Septic fingers and toes	8	Glands of neck	5
Tonsillitis	28	Rheumatism	5
Grazes	21	Boils	17
Bronchitis	11	Asthma	8
Threadworms	11	Whooping cough	1
Earache	9	Dysentery	2
Congenital heart	1	Urticarial rash	15
Parotitis	1	Catarrhal jaundice	13
Pyrexia	49	Sore throat	25
Glandular fever	1	Impetigo	5
Scabies	6	Influenza	26
Otorrhœa	9	The remaining number is of a varied character.	

From the month of September considerable difficulty was experienced in obtaining staff to replace those married during the years of war and who left to join their husbands on discharge from H.M. Forces. This, coupled with sickness of staff and leave of absence owing to the illness of parents, made the working conditions very trying for the staff on duty.

MONSALL AMBULANCE AND DISINFECTING STATION.

The Station comprises three sections, viz. :—

Ambulance, etc., Service ;
Bedding Disinfection Service ; and
Cleansing Clinic.

This service is the duty of the Local Authority and provides for the free conveyance of cases of infectious diseases to Monsall Hospital and Booth Hall Hospital and tuberculosis patients to Abergele, Baguley, and Delamere Sanatoria, and Barrowmore Colony. The service consists of seven vehicles.

During the year 2,561 cases of infectious diseases, other than tuberculosis, were removed to Monsall Hospital. In addition, 351 patients were removed to home addresses or other institutions, making a total of 2,912 cases. The number of tuberculous patients removed to sanatoria was 649, making a final total of 3,561 cases removed.

These transfers involved 3,112 journeys covering 60,715 miles.

This department is an integral part of the Public Health service and is co-ordinated with the various hospitals and operates within the area of adjacent local authorities who have entered into an agreement with Manchester for the treatment at Monsall of cases of infectious disease arising within their area and at the cost of the local authority.

The service is operated by a series of rotating duty shifts which covers twenty-four hours, and analysis of frequency of cases is given below :—

Analysis of ambulance journeys to Monsall Hospital in relation to times.

Time	10-30 p.m. to 7-30 a.m.	7-30 a.m. to 12-0 noon	12-0 noon to 3-0 p.m.	3-0 p.m. to 6-0 p.m.	6-0 p.m. to 10-30 p.m.
Total	41	659	905	611	345
Approximate daily average	·11	1·80	2·47	1·67	·94

Analysis of ambulance journeys to Monsall Hospital in relation to days of week.

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Frequency	210	390	421	377	377	417	369
Average	4·03	7·5	8·09	7·25	7·25	8·01	7·09

Upon cases of infectious diseases being removed to hospital a service is provided for the disinfection of clothing, bedding, etc. Three bedding vans are employed for the collection and return of these articles. During the period under review 39,364 articles were removed and disinfected, necessitating a mileage of 17,444 miles.

Cleansing Clinic.

The Cleansing Clinic adjoins the Ambulance and Disinfecting Station at Monsall Road, Newton Heath, and is used for :—

(1) The treatment of Scabies in adults and children.

(2) The disinfestation of persons from clearance areas to Corporation houses, and

(3) The cleansing (both compulsory and voluntary) of verminous persons.

The staff consists of :—

1 Health visitor (in charge).

2 Trained nurses.

3 Female orderlies.

2 Male orderlies.

The following table shows the number of treatments in their various classifications :—

	Scabies	Voluntary cleansing	Compulsory cleansing	Disinfestations	Total
January	914	163	20	33	1,130
February	1,106	167	40	74	1,387
March	1,573	179	51	44	1,847
April	1,174	182	Nil	44	1,400
May	700	215	Nil	57	972
June	1,055	233	Nil	37	1,325
July	763	201	Nil	29	993
August	769	237	Nil	35	1,041
September	1,003	220	20	25	1,268
October	1,079	257	51	67	1,454
November	1,382	237	57	34	1,710
December	592	153	17	15	777
Totals	12,110	2,444	256	494	15,304

SOCIAL WELFARE DEPARTMENT

Cases maintained by or chargeable to the Social Welfare Committee on the 1st January, 1946.

(a) Return of Mental Cases.

Institution	Class of Case Maintained	Suffering from Mental Infirmity
1. *Establishments*		
Belonging to Manchester:—		
Crumpsall Institution	General Hospital and Lunacy	499
Swinton Home	Mentally deficient children ..	9
2. *County Mental Hospitals*:—		
Lancaster	Persons of unsound mind ..	376
Prestwich	,, ,, ..	948
Winwick	,, ,, ..	428
Whittingham	,, ,, ..	207
Rainhill	,, ,, ..	174
Other County Mental Hospitals	,, ,, ..	32
The Mary Dendy Home, Sandlebridge, Alderley Edge	Mentally defective adults ..	5
Stoke Park Colony, Bristol	Feeble-minded persons ..	16
Whittington Hall, Chesterfield		2
Durran Hill House, Carlisle	Mentally defective women ..	3
St. Joseph's Home, Sudbury	Feeble-minded young women	1
	Total	2,700

THE NUMBER OF PERSONS WHO WERE IN RECEIPT OF POOR RELIEF FROM THE MANCHESTER SOCIAL WELFARE COMMITTEE DURING THE LAST WEEK IN EACH MONTH OF THE YEARS 1945 AND 1944.

	1945		1944	
	Indoor (excluding Casuals)	Out-door	Indoor (excluding Casuals)	Out-door
January	2,326	7,106	2,282	6,256
February	2,356	7,200	2,290	6,200
March	2,321	6,882	2,259	6,239
April	2,336	6,931	2,248	6,141
May	2,351	6,615	2,256	5,923
June	1,731	6,773	2,342	5,899
July	1,756	6,639	2,326	5,671
August	1,776	6,589	2,322	5,703
September	1,780	6,601	2,321	5,919
October	1,713	7,418	2,272	6,076
November	1,736	7,028	2,357	6,178
December	1,697	7,241	2,340	6,555

MATERNITY AND CHILD WELFARE.

The Midwifery Service.

During 1945 notice of intention to practice was given by 236 midwives, of whom 101 were employed in hospitals, 41 in nursing homes having no medical attendant, 14 in independent domiciliary practice, and 59 were municipal midwives. Twenty-one were employed by District Nursing Institutions.

Notified Births.

(1) Births at home	4,451
(a) Taken by midwives, including cases in which the midwife acted as maternity nurse (based on yearly return of cases made by midwives to Local Supervising Authority)	4,064
(b) Taken by doctors (no midwife present)	8
(c) Taken by St. Mary's Hospital district staff in Manchester area	379
(2) Births in institutions	8,043
(a) Hospitals	6,442
(b) Maternity homes registered under Sections 187/192 of the Public Health Act, 1936..	1,601
Total	12,494

Further particulars of these cases are shown in Table A.

Gas and Air Analgesia.

13 municipal midwives were trained in the administration of gas and air analgesia and others were receiving instruction at the end of the year.

At 31st December, 1945, 37 municipal midwives were qualified to administer gas and air analgesia and 20 had been supplied with Minnitt's apparatus.

Analgesia was accepted by 110 patients.

Supervision of Midwives.

Midwives were temporarily suspended from work on 120 occasions on account of contact with infection or being themselves liable to be a source of infection.

Midwives are encouraged to report cases with raised temperature before they become notifiable under the Puerperal Pyrexia Regulations, 1939. A staff of trained nurses is available to take over such cases.

No serious breach of the Rules of the Central Midwives Board occurred.

Handywomen.

In addition to the prohibitions contained in the Midwives Acts of 1902 and 1926, Section 6 of the Midwives Act, 1936, enables the Minister of Health to make an order for the area of a local supervising authority prohibiting unqualified persons from receiving any remuneration for attending as a nurse on a women in childbirth or during the following 10 days. Such an order has been made for Manchester and is entitled the "City of Manchester (Prohibition of Unqualified Persons) Order, 1939."

3 infringements of this order were reported.

TABLE A.
Analysis of cases taken by Midwives.

Midwives notifying intention to practise	Midwives	Midwife only at the case		Midwife with doctor called in		Midwife as maternity nurse	Total cases
		Primiparae	Multiparae	Primiparae	Multiparae		
1. Births at home—							
(*a*) Municipal midwives ..	59	333	2,421	88	264	452	3,558
(*b*) Independent midwives living in Manchester area	9	8	77	4	26	44	159
(*c*) Independent midwives living outside Manchester area	5	6	31	6	6	34	83
(*d*) Midwives employed by District Nursing Institution	21	16	124	15	33	76	264
	94	363	2,653	113	329	606	4,064
2. Births in institutions— Midwives employed in registered nursing homes having no resident medical officer	41	219	299	26	26	610	1,180
	135	582	2,952	139	355	1,216	5,244

Municipal Midwives.

Applications for municipal midwives numbered 4,143. 63 of these applications were withdrawn either for domestic reasons or due to removal from the district and of the remainder, 3,558 women were delivered in their homes, 343 were transferred to hospital on account of unsatisfactory conditions before or during labour, and 104 pregnancies ended before the 28th week.

There was no change during the year in the fees charged for the services of a midwife.

Of the cases attended, 109 were assessed to pay part fee and no charge was made in 37 instances.

Cases taken by municipal midwives show a decrease of 370 from the previous year.

Details of their work and visits are as follows:—

Deliveries between 9-0 a.m. and 9-0 p.m.	1,624	
,, ,, 9-0 p.m. and 9-0 a.m.	1,934	
Deliveries by midwife or maternity nurse		3,558
Cases of miscarriage nursed		104
Morning visits		58,004
Evening visits		21,484
Visits to patients discharged from municipal hospitals before the 14th day of the puerperium		9.255
Ante-natal visits to patients in their own homes		31,800
Ante-natal visits by patients to midwives' homes		11,392
Attendances by midwives at ante-natal clinics		1,558
Emergency calls		192

Training of Midwives.

10 municipal midwives are approved as "teacher-midwives" by the Central Midwives Board and they trained 27 pupil midwives in district experience.

A series of 6 post-graduate lectures, commencing in the autumn, was given by obstetricians. The lectures were well attended and much appreciated by the midwives.

Medical aid.

In accordance with the rules of the Central Midwives Board with regard to calling in medical aid, records were received as follows :—

Sent in by	Records sent to doctors		Records sent to Ante-natal Clinics
	Assistance in labour and puerperium	Assistance during pregnancy	
Municipal and independent midwives	2,631	360	....
Midwives of the District Nursing Association	153	1	1,583
Midwives in maternity homes having no resident medical officer	200	2	
Total	2,984	363	1,583

Payments to independent midwives by local authority.

The City Council has approved a payment of 10/- to a midwife in independent practice who loses the fee in a case booked by her which is transferred to hospital prior to or during delivery on the recommendation of a medical officer at a welfare ante-natal clinic. 2 such claims were approved.

Puerperal Pyrexia:

199 cases of puerperal pyrexia were notified during the year. The rate per 1,000 births was 14·3. Causes of pyrexia were:—

Puerperal sepsis	79
Incomplete abortions	22
Simple abortions	6
Threatened abortions	3
Malignant disease of uterus	1
Infected haematoma of vaginal wall	1
Mastitis	26
Pyelitis	11
Pre-patella bursitis	1
Influenza	2
Retained products	4
Pneumonia	3
Tonsillitis	2
Phlegmasia alba dolens	1
Fibrositis	1
Diarrhoea	1
Mild Uterine infection	2
Anaemia of pregnancy	2
Tuberculosis	1
Cardiac disease	1
Other causes	29
	199

Number of cases	Abortion	Death from abortion	Full term and premature labour	Deaths at full term
Puerperal Sepsis—79	2—3 months .. .. 17 3—4 ,, ... 8 4—6 ,, ... 3 28	—	Normal labour .. 39 Abnormal labour ..12 51 Of these— Full-term .. 41 Premature .. 10 51	—
Puerperal Pyrexia—120	2—3 months .. .. 22 3—4 ,, ... 6 4—6 ,, ... 4 32	—	Normal labour .. 68 Abnormal labour 20 88 Of these— Full-term .. 80 Premature .. 8 88	—

Maternal Deaths.

12 deaths from childbirth occurred amongst Manchester mothers. This number is a decrease of 11 compared with 1944.

3 deaths occurred from sepsis, one—a full term labour—occurred in a mother confined outside the Manchester area but whose home address was in Manchester, and 2 occurred in early pregnancy, due to: (1) Puerperal tetanus; (2) Septicaemia following self induced abortion.

Causes of death in child-birth.

Cause	Normal full-term labour	Abnormal full-term labour	Abortion and premature labour	Total	Rate per 1,000 registered live and stillbirths	
					1945	1944
Puerperal sepsis	—	1	2	3		1·04
Other causes	* 2	5	2	9		1·29

* These 2 cases were not notified as puerperal sepsis as they were not diagnosed until after the post-mortem examination.

Analysis of deaths due to other causes:—

Puerperal eclampsia	1
Eclampsia	1
Pulmonary embolism	3
Obstetric shock	3
Post partum haemorrhage and retained placenta..	1
	9

In addition to the above there were 9 deaths associated with pregnancy.

Analysis of cases of Puerperal Sepsis and Peurperal Pyrexia.

Number of Cases	Midwife						Doctor,			Doctor,			Institution			Hospital,		
	Midwife alone			Doctor present, called in according to C.M.B. Rules			Midwife acting as Maternity Nurse			No skilled nursing						External District		
Puerperal Sepsis (79 Cases)	Number of Attacks	Attack Rate per 1,000 Cases taken	Number of Deaths	Number of Attacks	Attack Rate per 1,000 Cases taken	Number of Deaths	Number of Attacks	Attack Rate per 1,000 Cases taken	Number of Deaths	Number of Attacks	Attack Rate per 1,000 Cases taken	Number of Deaths	Number of Attacks	Attack Rate per 1,000 Cases taken	Number of Deaths	Number of Attacks	Attack Rate per 1,000 cases taken	Number of Deaths
Labour and premature labour 51	16	4·52	—	8	16·26	—	6	4·92	—	—	—	—	19	2·36	—	1	2·46	—
Abortions .. 28	—	—	—	1	—	—	1	—	—	24 (23 sent direct to Monsall, 1 via other Hosp'l)	—	—	2	—	—	—	—	—
Puerperal Pyrexia (120 Cases)																		
Labour and premature labour 88	14	3·96	—	6	12·14	—	4	3·28	—	—	—	—	63 (including 8 resident outside Manchester)	7·85	—	2	5·19	—
Abortions .. 32	—	—	—	—	—	—	1	—	—	31 (30 sent direct to Monsall, 1 via other Hosp'l)	—	—	—	—	—	—	—	—
Total cases ..199	30	—	—	15	—	—	12	—	—	55	—	—	84	—	—	3	—	—

Pemphigus Neonatorum.

48 cases of pemphigoid eruptions were reported. 20 of these were notified as pemphigus neonatorum and 28 were not notified as such.

35 of these cases occurred in children under two weeks, 11 children between two and three weeks, and 2 between three and four weeks old.

Stillbirths.

Number of stillbirths notified	Delivered by			Percentage of notified births
	Midwives, including cases where doctor called in under C.M.B. rules	Doctors, including cases where midwife acted as maternity nurse	Hospital and nursing home staff	
* 420	76	11	333	1·93

* Of these 14 were mothers whose home address was outside the City.

Stillbirths in the practice of Midwives.

Compared with the 79 stillbirths which occurred in 1944, the figure of 76 for 1945 shows a slight decrease. 17 occurred in primiparae.

The percentage of stillbirths for all midwives' cases was 1·8.

Further particulars are shown below:—

	Primipara	Multipara	Total
Foetus fresh	8	27	35
Foetus macerated ..	9	32	41

Neonatal deaths in midwives' practices.

There were 56 neonatal deaths, of which 2 occurred before a medical practitioner could attend and were referred to the Coroner. In both cases a post-mortem was held. The findings were:—

(1) Congenital malformation of the head ;

(2) Cerebral haemorrhage during birth.

The care of premature and weakly babies.

The Ministry of Health Circular 20/44 dated March 22nd, 1944, on the care of premature infants, makes recommendations on arrangements for the care of these infants. In addition to the recommendations which were implemented in 1944, arrangements were made for fitted cots with draught proof linings to be available at 3 municipal hospitals as and when required by doctors and midwives.

A special nurse for the care of premature babies was appointed in August, 1945.

The following table gives a summary of the work done:—

Total number attended	121
Number where attendance ceased—baby attained 7lbs. weight	98
Transferred to hospital	8
Died at home:—	
(a) whilst nurse still attending	3
(b) after nurse had ceased to attend	5

(4 of these deaths were due to congenital heart defects).

35 infants were born under 4 lbs. in weight and 28 survived.

63 ,, ,, ,, 4 to 5 lbs. ,, ,, 57 ,,

23 ,, ,, ,, 5 to 6 lbs. ,, ,, 20 ,,

Average time nurse attended each case .. .. 5½ weeks.

Infants breast fed	50 (29 of these needed complementary feeds in addition).
Infants artificially fed	55

Artificial Feeding.

329 notifications of recourse to artificial feeding were received, 80 from midwives and 241 from institutions. In 79 of the total cases it was stated that artificial feeding was supplementary and not a complete change over. Of the remainder the causes given were:—

Tuberculosis in mother	26
Malformed nipples	70
Social reasons	24
Baby being adopted	31
Mastitis	18
Mother returning to work	6
Poor health of mother	32
Baby not progressing	6
On advice of the doctor	33
Death of mother	2
Twin pregnancy	2
	250

Special Nurses.

The visits paid by these nurses are summarised as follows:—

	Visits
Notified cases of puerperal pyrexia	378
Cases of raised temperature	1,187
Mammary abscess and mastitis	858
Phlebitis	69
Mothers whose condition was unsatisfactory during and after the lying-in period	153
Mothers with septic skin condition	147
Cases of abortion	48
Cases of infection in the house	21
Promotion and re-establishment of breast feeding.	16
Mothers of infants suffering from pemphigus neonatorum	7
Premature and immature babies	1,202
Septic and unsatisfactory conditions of the umbilicus	279
Pemphigus neonatorum and other skin conditions	922
Spina bifida	33
Ophthalmic conditions	344
Other unsatisfactory conditions of the infant ..	39

Summary of investigations other than nursing visits made by the Supervisors of Midwives and Special Maternity Nurses:—

Investigation visits to notified cases of puerperal Pyrexia ..	111
,, ,, *re* maternal deaths	22
,, ,, *re* notified cases of pemphigus neonatorum	1
,, ,, *re* medical records, etc.	3
Old cases re-visited	3
Total	140

Visits by:—

Supervisors of Midwives (including 201 visits *re* Home Help) ..	728
Domiciliary Nursing (including Ophthalmic Nursing) ..	11,777
	12,645

Ophthalmia.

3 state registered nurses with special ophthalmic training are employed. They visit and treat, under medical supervision, all cases of eye disease from birth to school age when those who still have eye defects are referred to the School Medical Officer. Cases are reported by midwives under the rules of the Central Midwives Board, medical practitioners and hospitals, medical officers at the child welfare clinics, and health visitors.

625 cases were visited. Of these 253 were of eye disease in older children (*i.e.*, 3 weeks to 5 years), and 372 cases of ophthalmia neonatorum. The visits paid numbered 6,074.

Ophthalmia Neonatorum.

290 cases were reported by midwives for unsatisfactory eye conditions. 86 of these were infants who had been discharged from hospital before the 14th day. 82 were notified by medical practitioners (either privately or at the Royal Eye Hospital) as cases of ophthalmia neonatorum.

As a result of modern methods of treatment many cases have been nursed at home which would formerly have required hospital treatment.

Corneal defects.

2 cases of traumatic injury occurred:—

(i.) a ruptured globe in a baby 2 days old;

(ii.) a case of deep corneal abrasion in a baby 14 days old.

Both are making good progress and should have some sight.

Corneal defects in older children:—

5 cases of corneal ulcer were reported in older children, 2 of these occurring after measles. All made satisfactory progress and no loss of eyesight resulted. It is interesting to note the figures for the eye conditions associated with malnutrition. The number of cases where the cornea was affected was the same as during 1944. All these children had cod liver oil and orange juice.

There was an increase in cases of Blepharitis. The majority of these cases were very slight and soon responded to treatment. It was ascertained that these children also were having cod liver oil and orange juice.

Year	Blepharitis	Corneal Opacity (found as ulcer or nebula)
1941	16	8
1942	13	10
1943	13	7
1944	5	5
1945	11	5

Sunshine Home for Blind Babies.

One child was maintained by the Public Health Committee in the Sunshine Home for Blind Babies at Northampton suffering from right and left congenital microphthalmus.

Eye diseases in older children.

Reports on 8 children having corneal and/or congenital defects, who were under supervision by the ophthalmic nurses, were referred to the School Medical Officer, the children having attained school age.

Analysis of Eye Diseases in Older Children.

	Old cases brought forward from 1944	New cases in 1945	Carried over to 1946
Simple conjunctivitis	22	179	23
Purulent conjunctivitis	—	4	—
Lacrymal obstruction	6	29	6
Dacryocystitis	—	3	—
Blepharitis..	2	11	5
Corneal Ulcers	1	—	2
Corneal Nebulae	15	5	11
Coloboma	3	2	8
Cataract congenital	9	4	8
Cataract polar	1	—	1
Glioma	2	3	4
Defective vision	1	—	1
Microphthalmus	3	—	2
Pterygium	—	—	—
Nystagmus	5	1	2
Anophthalmus	2	2	4
Hordeolum	—	6	—
Phlyctenula	—	2	1
Albino	1	—	1
Ptosis	1	—	1
Leucoma	—	—	—
Buphthalmosis	2	1	1
Photophibia	1	—	—
Traumatic injury..	—	1	1
	77	253	82

Maternity Beds.

The arrangements made by the Public Health Committee comprise the following:—

(1) Maternity units at the two municipal general hospitals, Withington and Crumpsall, giving a total of 232 beds.

(2) Maintenance of beds in voluntary institutions, viz.:—

St. Mary's Hospitals (for first and abnormal cases) ..	2
Denison House	2
North Manchester Maternity Home	2
Crossley Hospital	2

(3) Municipal Maternity Homes at Prestbury Hall and Collar House, Prestbury, Cheshire.

Prestbury Hall was made available to the Public Health Committee in February, 1945, in consequence of an arrangement with St. Mary's Hospitals, whereby St. Mary's administer this maternity home on behalf of the Committee.

A similar arrangement became effective on 1st May, 1945, as regards Collar House.

The beds provided consist of 22 at Prestbury Hall and 33 at Collar House.

The following admissions were arranged:—

(1) Maternity wards of municipal hospitals		4,115
(2) Reserved beds in voluntary institutions		92
(3) Prestbury Hall	440	
Collar House	523	
	——	*963

The average stay at Prestbury Hall was 12·25 days and at Collar House 11·84 days.

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* Including 17 from outside the City Boundaries.

Welfare Centres.

At the end of 1945 there were 23 municipal infant welfare centres and one voluntary centre in the Holy Name schoolroom for which the City supplies the medical officer. This centre is otherwise staffed by the Sisters of Charity of the Order of St. Vincent de Paul.

There are at the various centres 114 weekly medical consultations, comprising 71 infant, 6 sunlight, and 37 ante-natal sessions. There are 6 toddlers' sessions at which an attempt is made to secure only the attendance of children between 2 and 5 years old.

There were at the end of the year on the centre register:—

8,715 children under 1 year	Total 16,627.
4,180 children between 1 and 2 years	
3,732 children between 2 and 5 years	

157,604 attendances were made at these sessions:—

110,748	by children under 1 year.
28,587	by children between 1 and 2 years.
11,920	by children between 2 and 3 years.
4,697	by children between 3 and 4 years.
1,652	by children between 4 and 5 years.

Massage and Remedial Exercises.

This work is performed by a staff of 9 full-time and 2 part-time physiotherapists.

Massage treatment is provided at 19 centres where 45 sessions are held each week. At 8 centres a weekly class of remedial exercises is held for children from 2 to 5 years. The ailments treated are postural defects, rickets deformities, general or local poor muscular tone, and some of the milder birth injuries.

There were 19,387 attendances for massage and 3,023 for remedial exercises.

Artificial Sunlight.

Treatment by ultra-violet light is given at the Chorlton-upon-Medlock, Cheetham Hill Road, Newton Heath, and Ardwick Clinics.

The number of individuals treated was 1,089 and the treatments given numbered 21,862; 1,047 of these were children of whom 122 were under 1 year old. The adults numbered 42 and included expectant mothers suffering from the various discomforts of pregnancy and post-natal debility. Children were treated for rickets, debility, adenitis, boils, anaemia, and malnutrition. 322 children ceased to attend before good results were obtained.

All cases discharged were notified to attend for re-examination at a period of from two to three months after cessation of treatment and 80 per cent. kept their appointments. 42 were recommended to have a further course of treatment.

Dental Clinics.

Sessions for dental treatment of nursing and expectant mothers and for children are held weekly at Rosamond Street and Cheetham centres respectively. Dental treatment is given and then three- or six-monthly invitations are sent for further inspection and treatment.

Cookery Demonstrations.

Cookery demonstrations are provided at 6 welfare centres, where mothers are taught the value of food and its preparation while their young children are "minded" on the premises.

Voluntary Workers.

During the year 91 voluntary workers gave valuable assistance at the child welfare centres. The number of attendances of these workers for the year was 7,813—an average of 1·1 workers per session.

The Schools for Mothers continue to provide voluntary workers for general assistance in the centres and this assistance was greatly appreciated.

"Make Do and Mend" Classes.

The two "make do and mend" classes opened during 1945 continue to prove beneficial to the mothers on the north and south sides of the City.

Ante-natal Clinics.

Ante-natal clinics are established at 16 centres where 37 sessions are held weekly. Four weekly sessions are held at Ardwick and Openshaw, tri-weekly at Collyhurst and Rusholme, and bi-weekly at Blackley, Chorlton-upon-Medlock, Cheetham, Clayton, Gorton, Harpurhey, Hulme, Levenshulme, Newton Heath, Northenden, and Withington; at Chorlton-upon-Medlock, Ardwick, and Hulme they are combined with V.D. treatment for mothers and children. There is one weekly session at Ancoats—6,545 new mothers were admitted and 32,689 attendances were made.

In addition to the ante-natal sessions provided at the welfare centres there are municipal ante-natal clinics established at Crumpsall and Withington Hospitals

Post-natal Clinics.

Every attempt was made to secure the attendance of mothers for post-natal examination at one of the 16 ante-natal centres and 264 presented themselves for complete examination 4—6 weeks after confinement. The results were as follows:—

Result of Post-natal Examinations.

1. Cases examined	264
2. Cases recovered	118
3. Cases not recovered	126
4. Cases not fully examined	20
5. Defects found	402
6. General post-natal conditions :—	
(A) Satisfactory	172
(B) Unsatisfactory	92
(i.) Due to labour—	
(*a*) Backache	30
(*b*) Anaemia	30
(*c*) Any other condition	51
(ii.) Due to old-standing disease	10
7. Local pelvic conditions—	
(A) Satisfactory	137
(B) Unsatisfactory	111
(C) Not examined	16
(i.) Prolapse	5
(ii.) Retroversion	48
(iii.) Subinvolution	29
(iv.) Cervical tears	27
(v.) Rectocele	38
(vi.) Cystocele	30
(vii.) Leucorrhoea	32
(viii.) Perineal tears	42
(ix.) Any other condition	17

8. Evidence of renal disease :—

(A) A.N. albuminuria	19
(i.) Recovered	13
(ii.) Not recovered	3
(iii.) Not examined	3
(B) Albuminuria P.N. only	—
(C) A.N. hyperpiesis	15
(i.) Recovered	6
(ii.) Not recovered	8
(iii.) Not examined	1
(D) Hyperpiesis P.N. only	3

Ante and Post-natal Exercises

Exercises for mothers during the ante- and post-natal periods are held at four infant welfare centres. At Rusholme, Northenden, and Withington the exercises are given by a physiotherapist in the employ of the department. At Levenshulme, by an arrangement with Ancoats Hospital, members of the staff of the Physiotherapy Department have continued to conduct these classes. The attendances were :—

Rusholme	319	
Northenden	578	
Levenshulme	253	
Withington	400	
	——	1,550

The purpose of this treatment is to improve the condition of the mothers after pregnancy and confinement.

Levenshulme Centre.

The work in this clinic has been highly satisfactory. The mothers are interested, keen, and appreciate the benefits they derive from the exercises.

Cases	64
Attendances	253

Of these 62 were ante-natal and 2 post-natal. Most patients were treated for weak musculature of the abdominal wall, with resulting postural strain.

Ailing Children.

Hospital treatment and follow-up work—

20 beds for children under 1 year and 10 for children between 1 and 2 years are retained at the Manchester Babies' Hospital

350 beds for children under 5 years are provided at the Booth Hall Hospital.

Remedial Day Nurseries.

Two such nurseries are maintained by the Schools for Mothers, one next door to the Openshaw Centre and one (the Spence Nursery) in the grounds of the University Settlement at Ancoats. The nurseries are maintained for children between 18 months and 5 years suffering from rickets, malnutrition, and debilitated conditions. Cases for these nurseries are recommended by the centre doctors. The children are retained until they are well or reach the age of 5 years.

The Corporation retains 5 beds at each of the nurseries.

Ante-Natal Cases at Centres and Number attending for Post-Natal Examination.

Centre	Number of normal births		Number of abnormal births		Died	Attended for post-natal examination
	Live births	Still-births	Live births	Still-births		
Ancoats	111	1	10	4	—	6
Ardwick	297	3	44	10	—	10
Blackley	264	3	59	18	1	16
Chorlton-upon-Medlock	168	—	11	6	—	3
Cheetham	350	7	18	10	2	13
Clayton	211	8	28	2	—	17
Collyhurst	415	4	57	13	—	12
Gorton	448	9	24	11	—	17
Harpurhey	353	4	26	—	1	11
Hulme	113	2	16	8	—	9
Levenshulme	282	6	34	11	1	22
Newton Heath	322	9	40	9	—	17
Northenden	256	2	38	14	—	49
Openshaw	530	6	109	14	—	26
Rusholme	465	7	42	5	—	11
Withington	312	7	27	3	—	25
Totals	4,897	78	583	138	5	264

Causes of deaths of mothers attending the centre ante-natal clinics during the year 1945.

Obstetric shock	2
Pulmonary embolism	1
Eclampsia	2

Ante-Natal Cases at centres and results of delivery, 1945.

Centre	No. on Register on 1st Jan., 1945	No. of new cases	Trans-ferred from another Centre	Total	No. still on Register Jan. 1st 1946	No. of " term " births	Still-births included in "term" births	No. of premature births	Still-births included in premature births	No. of mothers left district before confine-ment		Trans-ferred to another Centre	No. of mothers not pregnant	Totals
										Evac.	Rem.			
Ancoats	29	147	—	176	43	119	2	7	3	—	3	2	2	176
Ardwick	119	416	—	535	139	320	4	34	9	—	23	—	19	535
Chorlton-upon-Medlock	61	226	1	288	82	177	1	8	5	—	10	1	10	288
Collyhurst	135	558	2	695	179	444	7	45	10	—	11	4	12	695
Cheetham	143	435	5	583	149	365	7	20	10	—	29	2	18	583
Clayton	80	266	—	346	82	234	8	15	2	—	7	—	8	346
Gorton	193	458	2	653	146	461	7	31	13	—	9	1	5	653
Harpurhey	145	429	2	576	173	366	4	17	4	—	6	—	14	576
Hulme	32	193	1	226	69	122	4	17	3	—	10	—	8	226
Levenshulme	138	377	2	517	133	302	2	31	6	—	43	1	7	517
Newton Heath	143	438	—	581	149	347	8	33	9	—	42	2	8	581
Openshaw	222	784	2	1,008	267	596	12	63	8	—	55	2	25	1,008
Rusholme	170	611	2	783	224	500	6	19	3	—	24	2	14	783
Withington	147	402	2	551	154	345	7	4	3	—	21	—	27	551
Northenden	86	394	—	480	158	282	6	28	4	—	2	4	6	480
Blackley	128	411	2	541	162	308	3	36	8	—	22	2	11	541
Totals	1,971	6,545	23	8,539	2,309	5,288	88	408	70	—	317	23	194	8,539

Minor Ailments.

During the year 1945, 456 children under 5 years were referred from the child welfare centres to the school clinics for treatment for the eyes, ears, nose, skin, etc. 452 children were still undergoing treatment for ailments which had not been cured in 1944. Thus the total number of children was 908.

The classification in ailments and attendance of these children is shown, also the number who finished treatment.

Where attendance ceased before treatment was completed, and where non-attendance was reported by the School Medical Officer, the Health Visitors and child welfare centres were notified so that the cases might be followed up.

Ailment	No. of cases referred	No. still under treatment from 1944	Total	Reported not attending	Ceased attending but not finished treatment	Still under treatment	Finished treatment
Squint	123	187	310	5	6	245	54
Other eye affections	31	6	37	4	2	15	16
Otorrhoea	73	92	165	2	10	92	61
Other ear affections	8	7	15	—	2	8	5
Affections of nose	5	6	11	1	—	9	2
Impetigo	174	137	311	4	9	182	116
Other skin affections	27	12	39	—	—	24	15
Miscellaneous	15	5	20	—	—	8	12

Home Helps Service.

During 1945 an average of 15 home helps were employed, but towards the end of the year steps were taken to increase the number to the full establishment of 25.

The home-helps attended 270 cases, covering a period of 513 weeks and one day. In 110 cases the full fee of £2 10s. 0d. per week was paid, whilst in the remaining instances assessments were made according to family financial circumstances.

Applications for home helps are received from several sources, though the bulk were through welfare centres, midwives, and direct appeals to the central office.

Of a total of 395 applications made during 1945, 107 were withdrawn by the applicants.

This service continues to be in great demand.

War-time Nurseries.

There was no change in nursery accommodation in the City during 1945 compared with 1944.

Accommodation for 1,508 children is provided in 30 nurseries. Originally, accommodation during 24 hours was provided at Embden Street, Crossacres Road, Heaton Road, and St. Aidan's Nurseries, but there has been no demand for such extended hours since July, 1945.

The nurseries are open from 7 a.m. to 7 p.m. on Monday to Friday, and from 7 a.m. to 1 p.m. on Saturday.

Parents pay 1/- per day for admission of their children and the children in the nurseries are under medical supervision.

Work of Investigators.

In all cases where payment is required from the public in connection with Maternity and Child Welfare Services provided by the Public Health Committee, application may be made for the payment to be assessed according to circumstances, where it is suggested that the full fee cannot be afforded.

The investigators employed by the department made a total of 5,009 enquiries during 1945 in connection with applications for reduced payments *re* services of home helps, midwives, admissions to day nurseries, blind and deaf schools, municipal maternity beds, and medical fees.

Nursing Homes Registration.
(Public Health Act, 1936—sections 187-192.)

At 31st December, 1945, there were 20 registered nursing homes in the City, of which 6 were registered for maternity patients, 3 for medical, 6 for maternity, medical, and surgical, 2 for maternity and medical, 1 for surgical, and 2 for medical and surgical cases.

16 applications were received from voluntary hospitals for exemptions under Section 192 and all were granted.

All registered nursing homes were inspected at intervals.

National Milk Scheme.

The National Milk Scheme which came into operation in August, 1940, through the Ministry of Food, relieved the Corporation of responsibility with regard to liquid milk.

The Welfare Centres under the control of the Public Health Committee have continued as distribution centres for National Dried Milk to all holders of dried milk permits.

A quantity of proprietary brands and National Dried Milk was supplied free by the Department on the recommendation of the centre medical officers.

The cost to the Corporation of these free issues amounted to £468.

Mothercraft Exhibition.

The Maternity and Child Welfare Mothercraft Exhibition during 1945 comprised :—

(1) A clothing exhibition of model garments for the child 0—5 years and maternity belt for the expectant mother.

(2) Model diets for children from the weaning age to the age of 5 years. Diets of 3 meals for 2 complete days are given. The necessary amount of food to give the correct calories and vitamin contents were first worked out. Models in wax were then made.

(3) Home nursing of the sick child showing model cots and dolls with explanatory posters.

(4) Toy exhibition : this shows educational and constructional toys for the toddlers.

(5) " Safety First " in the home and garden. Models depicting how accidents occur and how they can be prevented.

860 patterns of model garments were sold at the child welfare centres.

Sections from the exhibition were loaned to the Day Trade School for Girls, Rusholme, and Messrs. Pattreiouex Ltd., Cheetham.

Child Protection.

Foster Children.

There were 149 foster children at the beginning of 1945. During the year 128 new cases were placed on the register and 171 were removed, leaving a total of 106 at the end of the year. Of the 128 new cases, 83 were illegitimate.

The following table shows the percentage of illegitimate foster children (new cases) during the last eight years :—

Year	Legitimate	Illegitimate	Percentage of illegitimate children
1938	96	149	60·81
1939	89	157	63·82
1940	102	140	57·85
1941	125	112	47·25
1942	112	160	58·82
1943	100	101	50·24
1944	84	107	56·01
1945	45	83	64·84

The number of visits paid by the Child Protection Visitor to foster children was 572. Visits paid by health visitors numbered 369. One foster child in an unsatisfactory home was removed by the Child Protection Visitor and placed with prospective adopters.

The following particulars show how homes were found for 128 new children :—

Introduced by Child Protection Officer	22
Friends and acquaintances	58
Children returned to late foster mothers	23
Relatives and parents	7
Neighbours	8
Voluntary Societies	2
Advertising	2
Health Visitor	1
Doctors and Matrons	2
Other Foster Mothers	3
	128

Details of children who ceased during the year to come under the child protection provisions :—

Returned to parent or relative	95
Attained the age of 9 years	11
Sent to special homes	14
Removed to other districts	6
Admitted to hospitals	24
Adopted without payment	21
	171

Municipal Foster Mothers.

In 1919 the Committee accepted the endowment of the Cheetham Institute for children deprived of the care of one or both parents and in return undertook to provide foster mothers for such children.

Since April, 1942, these foster mothers have received 20s. weekly for each child, and for this amount they undertake to clothe, feed, and care for the child. It is also a condition that the foster child should be taken regularly to the child welfare centre.

At the beginning of the year there were 7 foster mothers and 7 foster children. During the year 5 additional children were helped by the municipal grant, making a total of 12, At the end of the year 7 foster mothers and 8 children remained on the register.

The grant has been spent in maintaining the children of ill mothers or of widowers and unmarried mothers who could not make suitable arrangements for the care of their children.

The period of help given to each child varies, but no child is accepted after the age of 5 years. Usually suitable permanent arrangements are made before the child attains that age.

Adoptions.

During the year 285 applications were received from people wishing to adopt children.

354 applications were received from mothers who wished to have their babies adopted, and 40 expectant mothers made application before the baby was born but did not carry on with the adoption.

Of the 285 adopters, 41 cancelled their applications, 21 obtained children from another source, and 9 were considered unsuitable.

Of the 354 applications from mothers, 55 mothers decided to keep their babies, 16 cancelled their applications, 19 had their babies adopted through another source, 6 children died, 2 were considered unsuitable, and 68 are still waiting for their children to be introduced.

188 children were introduced to adopters and 118 of these were legally adopted during 1945. One of the children introduced had been abandoned by her parents and, although she was placed with adopters in August, 1945, a legal adoption order has not yet been granted because of the number of witnesses required to prove the child's identity.

26 cases were notified under Section 7 (3) of the Adoption of Children (Regulation) Act, 1939, and 33 cases were notified where a mother handed her child direct to the adopter (no legislation).

The child protection visitor paid 420 visits in connection with adoptions.

The number of third party introductions is increasing. Most of the third parties are members of the public who are unaware of the requirements of the Adoption of Children (Regulation) Act, 1939. The worst type of adoption is where the child has been handed by its mother to the adopter.

Care of Illegitimate Children and their Mothers.

The arrangements for implementation of Ministry of Health Circular 2866/44 were continued during 1945.

The health visitor specially appointed for these duties acts as a liaison between the mother and the Public Health and Social Welfare Departments and voluntary organisations, from whom assistance can be obtained by the mother during ante-natal or post-natal periods.

The work has steadily progressed during the year, and the following particulars indicate the extent of the department's activities in connection with special problems concerning married and unmarried women and widows and their illegitimate children.

Total number of visits and interviews for all purposes		1,028
Office interviews	449	
Home visits	563	
Attendances at Court	16	

New Cases.

Number of expectant mothers dealt with by Welfare Officer ..		211
Unmarried	128	
Married	74	
Widows	9	
Number of illegitimate children		239
Mothers unmarried	154	
,, married	77	
,, widows	8	
Total new cases		450

Child Separated from Mother.

	Legal Adoptions	Pending Adoption	In Rose Hill Convalescent Home	In residential nurseries awaiting Adoption	In Hospital awaiting admission to Orphanage	Total
Unmarried	16	9	2	6	1	34
Married	15	13	—	2	—	30
Widows	2	1	—	—	—	3
Total	33	23	2	8	1	67

Child kept by Mother.

	In Lodgings or absorbed into family	With mother awaiting Adoption	Joint Adoption by mother and her husband	With foster mother	Total
Unmarried	108	8	1	3	120
Married	44	2	1	—	47
Widows	5	—	—	—	5
	*157	10	2	3	172
					67
					239

* Mothers who had to work to maintain themselves and their children and who had no one capable of caring for them were advised to apply to a war-time day nursery for their admission.

In 6 cases where the mothers were in difficult circumstances, arrangements were expedited for the children to be admitted to the nurseries at short notice.

Special Help Given.

	Unmarried	Married	Widows	Total
Referred to and helped by Social Welfare Department	26	10	1	37
Given baby clothes from departmental sources. .	21	3	—	24
Referred to voluntary organisations for baby clothes	8	2	—	10
Arranged for hospital confinement	6	5	—	11
Assisted to find lodgings	6	—	1	7
Assisted to find employment	6	1	—	7
Arranged for admission of mother to hostels :—				
(*a*) Rose Hill Convalescent Home, Northenden	7	3	—	10
(*b*) 42, High Street (Manchester and Salford Mission)	3	—	—	3
(*c*) St. Teresa's Home, Salford (R.C.)	2	—	—	2
(*d*) Simpson Hill, Heywood (Diocesan) ..	1	—	—	1
(*e*) Oakhill, Salford (Salvation Army)	1	—	—	1
Visited because of neglect of child	6	2	—	8
Investigation and advice	33	12	8	53
Expectant mothers who requested adoption and were advised according to their circumstances	81	57	8	146
Children awaiting adoption—kept under observation	23	1	1	25
	230	96	19	345

Investigated and referred to Child Protection Officer	77
Advised *re* affiliation orders	34
	456

Affiliation Order Cases.

Applications for assistance received in 1944 and dealt with in 1945	9
Applications for assistance received in 1945 and dealt with in 1945	25
	34

Dealt with by Welfare Officer		Referred to Poor Man's Lawyer		Taken over by Social Welfare Department.
Taken to Court and orders granted	Investigated	Taken to Court and orders granted	Investigated	Orders
11	5	9	4	5

Total number of Orders granted = 20.

Brentwood Recuperative Centre.

This Centre is operated by the Community Council of Lancashire with whom the Corporation has an arrangement to pay for the maintenance of mothers and children admitted on the recommendation of the Maternity and Child Welfare Section.

9 mothers and 20 children were admitted to the Centre. The ages of the mothers ranged from 22 to 33 years, and the 20 children were under 5 years old. The families were visited by the health visitors a few days after discharge and revisited at frequent intervals.

The three primary reasons for recommending the above mothers for admission to Brentwood were :—

(1) Lack of training and experience in housewifery and child management.

(2) Ill-health and lowered vitality due to too rapid childbearing, depressing surroundings and environment, and, possibly in the case of some mothers, malnutrition.

(3) Unsatisfactory home conditions.

The most striking fact which emerges is the amazing improvement in the physical condition of the family, particularly the mothers, after their return home. Whilst they are away they develop an interest in their personal appearance. They put on weight and become more energetic and mentally more alert. The children are usually more well-behaved and are trained in clean habits. It can be said that the majority of these mothers have never before experienced such a way of life, where there is order and cleanliness, comfort and leisure, fresh air and pretty surroundings as a contrast to their own muddled, shiftless way of living, and it is hoped this experience will spur them on to fresh efforts,

Comparison of Children, in Age Groups, attending the Child Welfare Centres, December, 1945.

Centre	On Register, at beginning of 1945			New Patients			Died	On Register, January 1st, 1946		
	0—1 years	1—2 years	2—5 years	0—1 years	1—2 years	2—5 years		0—1 years	1—2 years	2—5 years
Abbey Hey	323	142	189	373	22	35	11	307	121	170
Ancoats	91	56	64	139	24	29	2	138	77	60
Ardwick	297	211	284	404	85	116	15	338	200	242
Blackley	387	273	421	372	18	69	3	449	224	407
Chorlton-upon-Medlock	250	106	97	290	38	56	3	307	160	115
Cheetham	342	187	136	368	50	60	3	438	175	149
Clayton	276	146	73	264	16	31	1	254	115	108
Collyhurst	393	244	161	393	54	102	15	418	223	168
Chorlton-cum-Hardy	367	261	240	416	40	47	3	542	239	199
Didsbury	229	155	119	231	19	36	3	306	168	127
West Gorton	396	173	240	384	66	89	7	533	182	256
Harpurhey	369	175	142	383	37	58	6	527	146	151
Higher Blackley	112	103	86	129	15	31	—	165	88	80
Holy Name	40	33	54	58	6	6	—	41	20	50
Hulme	193	107	79	212	35	33	8	204	131	92
Levenshulme	558	298	222	587	44	62	6	790	253	202
Newton Heath	395	198	186	373	36	74	5	488	189	183
New Moston	152	55	34	168	10	32	—	163	96	49
Northenden	284	196	260	268	35	71	5	293	175	205
Openshaw	434	211	155	458	59	76	15	426	271	201
Rusholme	408	251	112	540	64	86	5	612	227	142
Sharston	317	187	162	270	22	63	3	298	246	175
Wilbraham	239	119	100	199	19	25	4	203	161	81
Withington	560	308	262	465	41	49	5	475	293	120
Totals	7,412	4,195	3,878	7,744	855	1,336	128	8,715	4,180	3,732
Comparative Tables for Two Previous Years:—										
1944	6,495	4,171	3,663	8,865	981	1,406	109	7,412	4,195	3,878
1943	5,837	3,362	3,792	8,109	832	1,603	219	6,495	4,171	3,663

Health Visiting.

The health visitors are responsible for the general supervision of the nutrition and development of children under school age, the health and welfare of their mothers, and the teaching of mothercraft. Their duties also include the investigation and following-up of certain infectious diseases, scabies, and verminous conditions and health educational work generally. In January, 1945, the health visitors had under observation 50,196 children under five and 1,472 persons over five, representing 41,072 households and families.

Notification of Births.

Notifications numbered 13,449 as compared with 14,123 in 1944 and 12,748 in 1943. A certain number of these were notified from Blackpool and Prestbury, the mothers being Manchester evacuees.

The following table shows the source of notification and the place of birth of live and stillbirths.

MANCHESTER		BLACKPOOL		ST. MARY'S HOSPITAL, PRESTBURY		TOTALS	
Live	Still	Live	Still	Live	Still	Live	Still
12,074	420	1	—	934	20	13,009	440
						13,449	

Registered births numbered 11,362; of these 1,187 were illegitimate.

It has been possible in 10,852 births (10,559 live births and 293 stillbirths), representing 93 per cent. of the total registered births in the city, to consider the place in family of each birth, and this is shown in the following tables. Owing to movements of population greater difficulty is experienced in tracing removals. This accounts for the reduction in the number of children regarding whom information has been obtained.

Full-time and premature births have been separated, the accepted standard birth weight of 5½lbs. or under for premature babies having been adopted in 1938.

Age of mothers at birth of live children during 1945.

(A) *Place in family of each investigated birth (legitimate).*

Age group	Place in family															
Years	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total births
15—19 ..	194	20	1	—	—	—	—	—	—	—	—	—	—	—	—	215
20—24 ..	1511	661	161	36	6	—	—	—	—	—	—	—	—	—	—	2375
25—29 ..	1018	906	422	178	73	23	12	1	—	1	—	—	—	—	—	2634
30—34 ..	528	771	471	266	148	87	35	14	7	2	1	—	—	—	—	2330
35—39 ..	190	353	316	211	118	95	60	41	25	15	8	4	2	1	—	1439
40—44 ..	41	61	86	65	52	41	35	25	21	9	7	6	5	—	—	454
45—49 ..	1	2	3	7	4	4	3	4	4	4	4	2	2	2	—	46
50 + ..	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	1
	3483	2774	1460	764	401	250	145	85	57	31	20	12	9	3	—	9494

(B) *Place in family of each investigated birth (illegitimate).*

Age group	Place in family															
Years	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total births
15—19 ..	101	3	—	—	—	—	—	—	—	—	—	—	—	—	—	104
20—24 ..	242	44	26	7	2	1	—	—	—	—	—	—	—	—	—	322
25—29 ..	97	64	39	15	5	5	—	—	—	—	—	—	—	—	—	225
30—34 ..	41	31	32	26	11	7	5	2	—	1	—	—	—	—	—	156
35—39 ..	21	11	20	10	12	8	6	—	—	1	—	1	—	—	—	90
40—44 ..	6	1	4	5	6	4	1	2	2	1	—	1	1	—	—	34
45—49 ..	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—	2
	508	155	121	63	37	25	12	4	2	3	—	2	1	—	—	933

Age of mothers at birth of stillborn children during 1945.

(A) *Place in family of each investigated stillbirth (legitimate).*

Age group	Place in family															
Years	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total births
15—19 ..	4	1	—	—	—	—	—	—	—	—	—	—	—	—	—	5
20—24 ..	27	12	4	—	—	—	—	—	—	—	—	—	—	—	—	43
25—29 ..	32	14	5	4	3	1	1	—	—	—	—	—	—	—	—	60
30—34 ..	19	10	18	11	1	2	4	—	2	—	1	—	—	—	—	68
35—39 ..	16	13	12	8	5	3	—	1	—	1	—	—	—	—	—	59
40—44 ..	3	3	7	4	2	2	2	—	—	—	—	—	—	—	—	23
45—49 ..	—	—	—	—	1	2	—	—	1	—	1	—	—	—	1	6
	101	53	46	27	12	10	7	1	3	1	2	—	—	—	1	264

(B) *Place in family of each investigated stillbirth (illegitimate).*

Age group	Place in family															
Years	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total births
15—19 ..	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
20—24 ..	2	2	—	—	—	—	—	—	—	—	—	—	—	—	—	4
25—29 ..	4	1	—	1	—	—	—	—	—	—	—	—	—	—	—	6
30—34 ..	4	2	—	—	—	—	—	—	—	—	—	—	—	—	—	6
35—39 ..	—	2	3	1	—	—	—	—	—	—	—	—	—	—	—	6
40—44 ..	—	—	2	—	—	1	—	—	—	—	—	—	—	—	—	3
45—49 ..	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1
50 ..	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1
	11	7	5	2	1	1	—	—	1	—	—	—	—	—	—	28

Stillbirths.

The number of stillbirths allocated to the health visitors for investigation was 334.

Found children.

The health visitors found 1,407 other children belonging to families which had moved into Manchester during the war. The year of their birth was as follows:—

402 born in 1945.
430 ,, ,, 1944.
264 ,, ,, 1943.
192 ,, ,, 1942.
119 ,, ,, 1941.

Day-minded children.

A register of children whose mothers go out to work and who are cared for by relatives or neighbours is maintained.

The average number of day-minded children on the register during the year was 346 and the number of applications received for day-minders was 75.

Deaths.

738 deaths occurred amongst children under five years of age.

The classification according to age is:—

628 children under 1 year.
42 ,, ,, 1—2 years.
29 ,, ,, 2—3 ,,
19 ,, ,, 3—4 ,,
20 ,, ,, 4—5 ,,

The distribution according to age of children who died under one year was as follows:—

Died under 1 day	Died 1 to 7 days	Died 1 week to 4 weeks	Died 1 month to 3 months	Died 3 months to 6 months	Died 6 months to 9 months	Died 9 months to 12 months	Total
88	135	92	142	96	44	31	628

The following table gives mortality rates for the past ten years amongst children 1—5 years. This is based upon the number of live-births for the year.

Year	Infantile Mortality Rate	Mortality Rate 1—2 Group	Mortality Rate 2—5 Group	Mortality Rate 1—5 Group	Total cases of Measles		Total known cases of Whooping Cough	
					Cases	Mortality Rate per cent	Cases	Mortality Rate per cent
1936 ..	76·84	15·1	12·8	27·9	8,807	1·37	1,457	3·22
1937 ..	76·30	14·3	13·5	27·8	6,550	·68	1,403	3·77
1938 ..	69·03	9·8	11·5	21·3	9,949	·57	1,075	1·3
1939 ..	61·09	6·7	7·9	14·6	5,574	—	1,406	1·99
1940 ..	70·18	10·2	10·8	21·0	4,819	·18	668	·90
1941 ..	84·47	10·6	16·3	26·9	3,852	·57	4,689	1·41
1942 ..	64·52	5·5	7·6	13·1	10,468	·16	1,103	1·45
1943 ..	60·88	5·9	6·8	12·7	4,419	·27	3,277	1·28
1944 ..	53·59	5·6	3·8	9·4	6,727	·17	2,004	1·44
1945 ..	55·80	3·7	6·0	9·7	5,596	·23	1,835	1·41

Infant and Child Mortality per 1,000 Births.

Quinquennial periods 1911—1945.

Quinquennial Period	Infant Mortality	Child Mortality, 1—2 years	Child Mortality, 2—5 years
1911—1915	133·13	45·0	35·5
1916—1920	104·51	34·9	34·3
1921—1925	95·85	34·2	23·9
1926—1930	87·88	26·2	20·9
1931—1935	77·34	18·3	17·6
1936—1940	70·81	11·3	11·3
1941	84·47	10·6	16·3
1942	64·52	5·5	7·6
1943	60·88	5·9	6·8
1944	53·59	5·6	3·8
1945	55·80	3·7	6·0

Expectant Mothers.

Health visitors also visited at the end of six months all mothers who had given birth to a still-born child or to a child who had died before reaching the age of one month, in order to ensure adequate ante-natal care should she subsequently become pregnant. 367 stillbirths and 315 neo-natal deaths occurred in the City during 1944. 1,261 special visits were made by health visitors to these mothers and in this way 43 expectant mothers were brought to the notice of the Department.

Co-operation with School Health Department.

A report on every child reaching school age known, on the health visitors' final visit, to be suffering from medical defect or to have an unsatisfactory family history, is referred to the School Health Department. 1,286 such summaries were sent during the year, and they are classified as follows:—

Unsatisfactory condition in child	801
History of Tuberculosis in child	21
,, of Tuberculosis in family	178
,, of Rheumatism in child	25
,, of Rheumatism in family	177
Unsatisfactory history in family	84
	1,286

Admission to hospital of children under five years old.

30 beds were retained by the Corporation at the Duchess of York Hospital for Babies, 20 cots for children under one year, and 10 beds for children one year to three years. Recommendations for admission to these and to Booth Hall Hospital are made by the medical officers of the child welfare centres.

The number of children admitted to each hospital is shown below:—

	Number Admitted
Duchess of York—Cots	157
Large beds	73
Booth Hall	80
Total ..	310

The diagnosis made in the case of children under one year admitted to small cots in the Duchess of York Hospital for Babies and Booth Hall Hospital was as follows:—

	Duchess of York	Booth Hall Hospital
1. Prematurity	8	—
2. Congenital diseases and defects	1	—
3. Nutritional conditions	79	5
4. Gastro Intestinal conditions	23	9
5. Respiratory conditions	13	3
6. Surgical conditions	22	2
7. Miscellaneous diseases of bacterial origin	5	8
8. Miscellaneous diseases of nervous origin	6	—
	157	27

Diagnosis of children over one year admitted to Duchess of York Hospital and Booth Hall Hospital.

	Duchess of York	Booth Hall Hospital
1. Nutritional disorders	28	6
2. Gastro Intestinal conditions	7	6
3. Respiratory conditions	10	6
4. Surgical conditions	21	11
5. Miscellaneous diseases of bacterial origin.. ..	4	9
6. Miscellaneous diseases of nervous origin.. ..	3	—
7. Infectious diseases	—	4
8. Tonsils and Adenoids	—	11
	73	53

Care of Aged and Infirm Persons.
(Section 34 Manchester Corporation (General Powers) Act, 1930).

275 visits were paid to elderly persons referred to the Medical Officer of Health as suffering from serious infirmity and unable to provide themselves with proper care and attention. 65 have been under supervision as compared with 40 in 1944 and in each case better arrangements were made for their care.

The local Act provides for a Justices Order for compulsory removal to hospital in certain cases. 2 such orders were obtained during 1945.

Patients recommended for admission to hospital, for whom accommodation was not available.

During the year 285 such patients were referred to the health visitors for alternative arrangements to be made compared with 132 during 1944. 197 cases had been recommended for admission to Crumpsall Hospital and 24 to Withington Hospital. Many, however, were seriously ill and were found to be living alone or to be without neighbourly help.

The following table shows the arrangements ultimately made by the health visitors:—

Crumpsall Hospital—

Admitted to Crumpsall Hospital	197
Admitted to other hospitals	7
Attended Crumpsall Hospital, O.P.D..	4
Nursed at home by friends or by neighbours or district nurse	24
Died before admission to hospital could be arranged	6
	238

Withington Hospital.

Admitted to Withington Hospital	24
Admitted to other hospitals	12
Nursed at home by friends or by neighbours or district nurse	2
Died before admission to hospital could be arranged..	9
	47

Welfare of Families of Men in H.M. Forces.

Since the outbreak of war, many requests have been received from Commanding Officers, Army Welfare Officers, and Service Chaplains for help in dealing with applications from serving men for re-posting or compassionate leave because of problems arising out of the illness of a member of their family, or the care of their children. 37 such families were visited, the health visitors being able in each case to help the wife or parent with advice and guidance.

Measles, German Measles, Whooping Cough, and Pneumonia.

Measles.

The Measles and Whooping Cough Regulations came into force in 1939. These provide for the notification by medical practitioners of all cases of measles and whooping cough to the Medical Officer of Health.

The investigation of infectious disease is directed towards securing good nursing and isolation, preventing the spread of infection and more particularly, reducing the risk to children under five years of age.

Measles was first made notifiable in 1916 and until 1942 it regularly appeared in epidemic form every two years. In 1940 the highest number of notifications in one week was 700. The 1942 epidemic showed two peak figures—450 notifications in one week in May and 460 in one week in November. The peak of the 1944—45 epidemic was reached in November with 530 notifications.

The following table shows the number of cases of measles during the last four epidemics with a comparison of the deaths of children under and over five years of age.

Measles—Years 1938 to 1945 (*inclusive*).

Year	Known Cases	Over 5 years	Under 5 years	Deaths					Total under 5 years	Total Measles Deaths	
				Under 1 year	1 year	2 years	3 years	4 years			
1938	9,949	3,166	6,783	13	23	7	5	4	52	57	43 in 1st quarter
1939	574	209	365	..	..	..	..	..	..	..	Nil
1940	14,844	5,400	9,444	10	8	3	..	1	5	28	14 in 3rd quarter
1941	3,869	1,425	2,444	8	7	3	2	1	21	20	16 in 1st quarter
1942	10,468	3,773	6,695	4	5	2	1	1	13	17	8 in 2nd quarter
1943	4,419	1,240	3,179	3	6	3	..	..	12	12	8 in 1st quarter
1944	6,736	2,146	4,590	2	3	2	1	1	9	9	8 in 4th quarter
1945	5,596	1,305	4,291	3	2	3	..	..	8	8	5 in 1st quarter

Number of notifications of Measles.

Cases notified by doctors	4,697	
Cases found by health visitors	899	
Total number of known cases ..	5,596	
Total number of cases investigated..		5,596

This is a decrease of 1,131 compared with the previous year.

In addition 112 un-notified cases were found after complete recovery had been made and are classified as "late" cases.

The deaths amongst children under five continue to diminish. In the 1935—36 epidemic the total deaths were 219 with a case mortality of 1·14 per cent. In the 1941—2 epidemic the total deaths were 37—a case mortality of ·26 per cent.

The Public Health Department has an arrangement with the Manchester and Salford District Nursing Institution for the nursing at home, where necessary, of children suffering from measles and its complications.

The following table shows the incidence of pneumonia in measles.

	Nursed at home		Removed to hospitals		Developed Measles whilst in hospitals		
	5,406		130		60		
	Not having Pneumonia	Complicated Pneumonia	Not having Pneumonia	Complicated Pneumonia	Not having Pneumonia	Complicated Pneumonia	Totals (1945)
Number of cases ..	5,372	34	94	36	58	2	5,596
Recovered ..	5,370	28	93	34	57	1	5,583
Died	2	6	1	2	1	1	13
Case fatality	·04%	17·64%	1·06%	5·55%	1·72%	·50%	·23%

Visits to cases of measles numbered 13,091.

German Measles.

All cases of German Measles are notifiable and those under 16 years old investigated by health visitors.

Cases notified	358
Cases investigated	316
Cases recovered	357
Cases died	1

Visits paid by the health visitors 650.

Whooping Cough.

Cases notified	1,835
Cases investigated	1,835

In addition 116 cases were discovered after complete recovery had been made and were classified as "late" cases.

The following table shows the incidence of pneumonia in whooping cough:—

	Nursed at home		Removed to hospitals		Developed Whooping Cough whilst in hospitals		
	1,693		135		7		
	Not having Pneumonia	Complicated Pneumonia	Not having Pneumonia	Complicated Pneumonia	Not having Pneumonia	Complicated Pneumonia	Totals (1945)
Number of cases ..	1,671	22	83	52	6	1	1,835
Recovered ..	1,667	15	82	38	6	1	1,809
Died	4	7	1	14	—	—	26
Case fatality	·23%	31·81%	1·204%	26·92%	—	—	1·41%

The total number of visits paid to children suffering from whooping cough was 3,321.

Pneumonia.

Acute primary and influenzal pneumonia is notifiable, though many cases are only revealed through the death returns.

During 1945 the following notifications of pneumonia were received:—

Primary Pneumonia—	Lobar	587	
	Lobular	207	
	Unclassified	19	
			813
Influenzal Pneumonia			44
			857

There were 365 deaths consisting of 139 lobar, 210 lobular, 9 unclassified, and 7 influenzal. Of these totals 256 consisting of 69 lobar, 177 lobular, 9 unclassified, and 1 influenzal were brought to the notice of the department through the death returns.

In addition there were 25 cases of secondary pneumonia. Thus the total number of known pneumonia cases for the year was:—

Total primary notified	813
Total primary per death returns	255
Total primary	1,068
Total influenzal notified	44
Total influenzal per death returns	1
	1,113
Total secondary	25
Total all types	1,138

Primary Pneumonia.

Of the 1,068 cases of primary pneumonia, 656 were classified as lobar, 384 as lobular, and 28 simply as pneumonia. The number of cases investigated by the health visitors was 953.

Influenzal Pneumonia.

44 cases of influenzal pneumonia were notified and 1 discovered through the death returns, a total of 45 cases.

Of all the cases of pneumonia known to the department, 585 were transferred to hospital and of those nursed at home, 52 were attended by nurses supplied by the Manchester and Salford District Nursing Institution.

Treatment of Scabies and Verminous Conditions.

Verminous Conditions.

The Education Department has hitherto been the main source of notification of lice infestation, but a large number are also discovered by the staff of Monsall treatment clinic.

The following table gives comparative figures from all sources for the last five years.

Verminous Conditions.

SOURCE OF NOTIFICATION	1941	1942	1943	1944	1945
School medical officer	1,109	1,014	1,194	1,438	1,790
General practitioners	17	12	26	39	45
Voluntary and municipal hospitals	2	1	9	8	21
Centre medical officers	11	33	18	27	21
Health visitors	441	348	295	330	47
Voluntary application	31	42	66	135	115
Discovered at Monsall..	17	122	1,324	879	900
Salvation Army	25	23	43	221	159
H.M. Forces	—	—	—	14	1
Civil Defence, Evacuees	36	11	1	1	—
Sanitary inspectors	—	—	70	40	7
Business houses	—	—	9	7	6
Tuberculosis Clinic	—	—	—	—	—
Day Nurseries	—	—	—	—	2
Ministry of Labour	—	21	1	—	—
Ministry of Health	—	4	—	—	3
Social Welfare	—	1	6	—	5
Total	1,689	1,632	3,062	3,139	3,122

Circular 2831 of the Ministry of Health issued in 1943 urged Welfare Authorities within the scope of their present powers to assist mothers and young children in the promotion of cleanliness and good habits and the elimination of verminous conditions. The Minister of Health was of the opinion that the primary responsibility for the cleanliness of children rests with their mothers, and this being so "the education of the mothers, present and future, is of the first importance."

Certain difficulties arise in following up adolescent workers notified as verminous. Evening appointments have to be made and these are not always kept by the person notified. This is a waste of time and the present staff is inadequate for dealing with this extra visiting.

Treatment of Verminous Conditions.

The following table shows the number of persons treated for a verminous condition at Monsall and Withington clinics during the last three years. Withington clinic was closed on 18th November, 1944, to economise in staff and equipment following the reduction in notified cases of scabies.

Year	Clinic	Males	Females	School Children	Children under five	Total	
		Adult	Adult				
1942 ..	Monsall	110	363	166	125	764	790
	Withington ..	—	9	11	6	26	
1943 ..	Monsall	202	1,017	510	323	2,052	2,188
	Withington ..	1	58	52	25	136	
1944 ..	Monsall	431	1,205	711	434	2,781	2,990
	Withington ..	—	69	104	36	209	
1945 ..	Monsall	329	751	406	222	1,708	

In addition the number of school children compulsorily cleansed for the Education Department was 256.

Supply of Sacker's Steel Combs.

The Department has a scheme for supplying special steel combs at cost price to mothers. 394 steel combs were distributed as compared with 439 during 1944.

2,461 visits were paid to the homes of verminous persons. This is exclusive of those paid to persons already under supervision in the course of health visiting.

Experiments were carried out to discover the relative value of lethane oil and an emulsion of D.D.T. in the treatment of head infestation, and future policy at Monsall clinic will be determined by the results.

Scabies.

The main source of notification of scabies is the Education Department, but many cases are brought to the notice of the health visitors, either as contacts of those notified by the School Medical Officer or as new cases. There has been a marked increase during the last few years in cases notified by general medical practitioners.

The source and number of notifications received during 1945 and the preceding years was as follows:—

Source of Notification	1942	1943	1944	1945
School medical officer	3,121	2,806	2,282	1,670
Booth Hall hospital and other municipal hospitals	9	253	120	73
General practitioners	2,043	248	1,959	1,571
Centre medical officers	262	262	157	211
Health visitors	2,875	5,326	3,043	1,842
Applied voluntarily	714	880	1,347	1,130
Skin hospital	896	776	638	559
Discovered at Monsall	5	35	203	61
H.M. Forces	20	10	11	—
Salvation Army	5	10	13	—
Voluntary hospitals	35	92	47	40
Social Welfare	—	—	—	4
Rest centres	25	6	10	—
Tuberculosis Clinic and N.S.P.C.C.	8	6	3	—
Sanitary department	3	2	1	2
Ministry of Labour	—	—	6	—
Ministry of Health	4	7	7	4
Business houses	—	41	29	20
Day Nurseries	—	—	—	28
Total	10,025	12,950	9,878	7,215

The number of persons treated at Monsall and Withington clinics is shown in the following table:—

Year	Clinic	Males	Females	School Children	Children under five	Total	
		Adult	Adult				
1942 ..	Monsall	1,454	3,361	1,408	1,454	7,677	8,523
	Withington ..	107	357	211	171	846	
1943 ..	Monsall	1,748	3,869	1,791	1,586	8,994	11,234
	Withington ..	260	961	607	412	2,240	
1944 ..	Monsall	1,535	3,249	1,556	1,239	7,579	10,795
	Withington ..	389	1,389	878	560	3,216	
1945 ..	Monsall	1,313	2,951	1,309	1,052	6,625	

Scabies is treated by two applications of an emulsion of benzyl benzoate, with an interval of from one to four days between the first and second treatments.

The following table shows the number of treatments given during 1945 and the three preceding years:—

Year	Clinic	Males	Females	School Children	Children under five	Total	
		Adult	Adult				
1942 ..	Monsall	3,488	8,373	3,530	3,677	19,068	20,497
	Withington ..	178	615	371	265	1,429	
1943 ..	Monsall	3,183	7,787	3,546	3,061	17,577	21,839
	Withington ..	494	1,847	1,174	747	4,262	
1944 ..	Monsall	2,771	6,161	2,936	2,284	14,152	17,552
	Withington ..	419	1,468	926	587	3,400	
1945 ..	Monsall	2,322	5,401	2,432	1,955	12,110	

The health visitors paid 8,863 visits to homes in which scabies occurred.

National Society for the Prevention of Cruelty to Children.

The Department is again indebted to this Society for assistance in dealing with certain difficult families. During the year help was sought in 47 cases as compared with 69 in 1944, and 33 in 1943.

The disruption of family life caused by war conditions, and the employment of mothers, led to a serious deterioration in the standard of child care and home management, and an intensification of home visiting has been needed in a large number of cases. Because of the difficulty experienced in seeing mothers who go out to work, visits are often paid in the early morning or late evening, and Saturday afternoon, and these have revealed a disturbing indifference on the part of some parents to the welfare of their children. Young children are frequently left alone at night without the protection of a fire guard and there is much thoughtless neglect bordering on cruelty.

Visits Paid by Health Visitors during 1945.

Type of Visits.

Visits	January	February	March	April	May	June	July	August	September	October	November	December
INFANT WORK.												
00 Primary visits	1378	1017	837	1080	1157	1064	927	1012	926	1208	1096	713
01 Subsequent visits	3500	2967	2273	3261	3119	3338	2720	2480	2079	2721	2476	1766
02 Children 1— 2 years	2491	2214	1683	2255	2097	2451	1913	1636	1419	1816	1610	1151
03 ,, 2— 3 ,,	2295	1931	1576	2055	1938	2278	1798	1589	1218	1605	1383	1032
04 ,, 3— 4 ,,	2004	1511	1221	1701	1554	1762	1295	1337	846	1100	1032	786
05 ,, 4— 5 ,,	2249	1736	1260	1985	1660	1822	1523	2242	819	1368	1047	865
06 ,, 5—14 ,,	2000	1456	1383	1120	687	731	565	794	349	826	596	568
07 ,, —removals	408	404	357	411	424	551	386	394	264	363	351	232
08 ,, not seen	752	723	643	689	736	1064	814	796	597	626	648	465
09 ,, nursed out over five years	9	8	14	6	33	29	2	9	—	1	2	3
ANTE-NATAL CARE.												
10 Stillbirths, primary	30	33	21	24	21	24	22	22	17	24	33	14
11 ,, subsequent, Ex.	1	—	1	2	1	16	25	5	—	8	4	2
12 ,, ,, N.P.	7	4	3	3	2	60	45	40	12	21	10	12
13 Neonatal deaths, Ex.	1	2	—	1	1	1	1	3	—	4	4	5
14 ,, ,, N.P.	6	3	1	1	1	34	22	18	3	16	15	22
Expectant mothers,—												
15 Primary visits	536	598	397	189	182	234	199	224	156	218	201	128
16 Subsequent visits	135	128	88	73	96	99	109	151	86	103	70	68
OVERCROWDING AND SANITARY DEFECTS.												
20 Overcrowdings	—	—	—	—	—	—	—	—	1	—	—	—
21 Defects reported	10	13	5	12	5	7	12	9	7	19	10	6
22 Special visits	—	1	1	2	2	1	8	3	1	6	—	2
SCABIES.												
26 Primary visits	438	451	448	349	262	362	278	274	342	503	419	204
27 Subsequent visits	449	385	339	526	335	458	345	311	277	433	384	291
VERMINOUS WORK.												
28 Primary visits	118	102	132	110	31	26	126	131	85	302	149	246
29 Subsequent visits	95	81	56	83	32	72	50	105	42	78	53	156
MEASLES WORK.												
30 Primary visits	2145	1209	924	420	292	95	69	44	22	42	23	22
31 Subsequent visits	2141	1743	1099	1300	634	438	130	121	47	65	42	24
32 German measles, primary	68	37	22	33	28	24	28	21	8	17	20	10
33 ,, ,, subsequent	87	47	21	40	35	23	15	18	8	19	9	12
WHOOPING COUGH.												
34 Primary Visits	175	122	108	135	126	109	130	177	86	119	137	141
35 Subsequent visits	217	150	148	128	126	143	144	141	124	217	140	78
PNEUMONIA.												
36 Primary visits	183	154	90	78	86	57	55	64	39	72	63	103
37 Subsequent visits	134	110	67	102	57	75	53	45	37	43	51	48
INFLUENZA.												
38 Primary visits	4	6	—	2	1	1	2	1	—	—	1	—
39 Subsequent visits	1	1	1	—	—	—	—	1	—	—	—	—
MISCELLANEOUS.												
40 Investigations *re* infantile diarrhoea	—	—	—	1	—	—	—	—	—	—	—	—
41 Aged and infirm cases	15	23	20	26	37	22	21	14	15	36	15	31
Wrong addresses—												
42 Infants	41	26	24	37	26	31	30	32	23	42	24	21
43 Infectious diseases	31	11	25	10	6	8	7	4	8	20	8	6
44 Special visits (not otherwise accounted for)	166	324	178	138	133	119	111	103	547	148	108	106
45 Visits " out "	1120	857	890	1083	956	1104	981	795	543	836	702	687
46 Persons over 14 years	1641	1762	1200	1015	915	1223	1079	935	1291	1219	1037	898
Investigations of 33B—												
47 Primary	58	9	32	16	5	11	18	16	8	9	11	6
48 Subsequent	113	131	122	114	101	165	149	99	90	147	149	161
Investigations of other cases of V.D.—												
49 Primary	—	8	2	4	2	4	3	1	7	9	5	3
50 Subsequent	—	1	4	7	1	10	1	4	9	13	11	9
Total	27252	22499	17716	20627	17943	20146	16211	16221	12458	16442	14149	11103

Statement of work done at the Child Welfare Centres, 1945.

heetham	Chorlton-cum-Hardy	Clayton	Chorlton-upon-Medlock	Collyhurst	Didsbury	Gorton	Harpurhey	Holy Name	Hulme	Levenshulme	Newton Heath	Northenden	Openshaw	Rusholme	Sharston	Wilbraham	Withington	Munn Lane	New Moston	Totals
06	2,642	1,687	2,776	2,933	1,590	2,353	3,033	437	1,496	3,356	2,753	2,309	3,380	2,365	2,417	1,285	3,577	1,197	802	53,278
26	2,754	2,020	2,034	3,469	1,898	2,884	3,447	434	1,385	3,353	3,376	2,322	3,541	2,842	2,713	1,327	3,384	1,260	341	58,125
39	6,431	3,204	2,899	4,326	4,000	5,016	5,964	935	2,111	10,602	5,113	3,826	4,023	4,806	3,780	3,452	7,922	1,857	2,079	10,4326
74	6,686	3,521	2,126	6,686	5,079	5,217	6,566	592	2.186	10,253	5,978	4,728	4,777	5,463	4,311	4,799	8,661	2,053	647	114,042
45	9,073	4,891	5,675	7,259	5,590	7,369	8,997	1,372	3,607	13,958	7,866	6,135	8,003	7,171	6,197	4,737	11.499	3,054	2,971	157,604
00	9,440	5,541	4,160	10,155	6,977	8,101	10,013	1,026	3,571	13,606	9,354	7,050	8,318	8,505	7,024	6,126	12,045	3,313	988	172.167
99	464	295	381	633	388	626	618	67	266	891	605	588	601	522	555	211	713	259	220	11,222
40	489	333	354	751	419	699	685	50	256	887	673	613	620	576	596	265	734	292	241	12,226
61	707	635	877	1,401	430	1,276	1,419	—	760	1,125	1,350	1,366	1,469	1,160	—	—	1,030	—	—	19,387
15	791	616	1,006	1,339	462	1,130	1,470	—	745	1,298	1,304	1,730	1,356	970	—	—	1,230	—	—	20,377
— —	298 Children —	244 Children —	318 Children —	— —	— —	— —	— —	— —	— —	530 Children 253 Mothers	— —	579 Children 578 Mothers	— —	326 Children 319 Mothers	— —	— —	453 Children 400 Mothers	— —	— —	3,023 Children 1,550 Mothers
—	163 Children —	249 Children —	323 Children —	— —	— —	— —	— —	— —	— —	598 Children 368 Mothers	— —	724 Children 428 Mothers	— —	312 Children 352 Mothers	— —	— —	728 Children 550 Mothers	— —	— —	3,598 Children 1,698 Mothers
30	—	—	7,158	—	—	—	—	—	—	—	3,573	—	—	—	—	—	—	—	—	21,862
33	—	—	6,874	—	—	—	—	—	—	—	3,935	—	—	—	—	—	—	—	—	22,024
—	—	—	115	—	—	—	—	—	185	—	—	173	308	—	—	—	213	—	—	1,054
—	—	—	97	—	—	—	—	—	203	—	—	284	287	—	—	—	310	—	—	1,316
68 A.N. 16 P.N.	— —	1,459 A.N. 25 P.N.	741 A.N. 5 P.N.	2,795 A.N. 20 P.N.	— —	2,037 A.N. 21 P.N.	2,326 A.N. 31 P.N.	— —	743 A.N. 14 P.N.	1.976 A.N. 24 P.N.	2,466 A.N. 22 P.N.	1,689 A.N. 62 P.N.	4,112 A.N. 36 P.N.	3,064 A.N. 17 P.N.	— —	— —	2,093 A.N. 1 P.N.	— —	— —	32,342 A.N. 347 P.N.
44 A.N. 26 P.N.	— —	1,538 A.N. 26 P.N.	1,059 A.N. 6 P.N.	3,388 A.N. 12 P.N.	— —	2,680 A.N. 16 P.N.	3,184 A.N. 54 P.N.	— —	725 A.N. 9 P.N.	2,292 A.N. 22 P.N.	2,521 A.N. 19 P.N.	1,820 A.N. 49 P.N.	4,635 A.N. 42 P.N.	3,163 A.N. 43 P.N.	— —	— —	2,614 A.N. 6 P.N.	— —	— —	37,302 A.N. 392 P.N.
—	—	—	1,558	—	—	—	—	—	863	—	—	—	—	—	—	—	—	—	—	5,607
—	—	—	1,608	—	—	—	—	—	1,040	—	—	—	—	—	—	—	—	—	—	6,365
12 Mothers 30 Children	— —	— —	301 Mothers 627 Children	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	613 Mothers 1,057 Children
05 Mothers 50 Children	— —	— —	294 Mothers 608 Children	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	— —	699 Mothers 1,058 Children

VENEREAL DISEASES.

The total number of persons attending Manchester clinics in 1945 was 10,429 compared with 9,183 in 1944. Of this number, 4,674 were found to be suffering from conditions other than venereal disease.

The number of individuals (including 231 service men) with venereal disease attending for the first time was 2,749, compared with 2,486 in 1944.

Syphilis.

New cases of syphilis in males numbered 445 and in females 482, as against 495 and 568 respectively in the previous year.

Gonorrhoea.

New cases of gonorrhoea among males numbered 1,266 and among females 545, the comparable figures for 1944 being 936 and 481.

Discharges and Defaulters.

During the year 1,314 persons were discharged after satisfying the final tests of cure. On the other hand 944 persons ceased to attend before their courses of treatment were completed. Letters were sent to defaulters and many returned for treatment to the same or some other clinic, but the problem of dealing with these people remains a serious one.

Preventive Treatment Centre.

The Preventive Treatment Centre, opened at St. Luke's Hospital on April 1st, 1937, continues to perform useful work. This Centre treats men who have exposed themselves to possible infection and who present themselves within six hours of exposure at any hour of the day or night. In 1945 as many as 2,769 persons attended for treatment, for the most part during the night time and early hours of the morning. It is significant that no persons receiving this preventive treatment reported subsequently at any of the clinics with established disease.

Penicillin.

Penicillin treatment was given to 756 patients during the year.

General.

Education by posters, leaflets, lectures, and cinema shows has been actively pursued.

Summary of Work Done at all the Centres during 1945.

	Syphilis		Soft Chancre		Gonorrhoea		Non-venereal or undiagnosed conditions		Totals	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1. Number of cases on 1st January under treatment or observation	725	932	—	—	347	426	384	303	1456	1661
2. Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection	55	67	—	—	39	40	—	—	94	107
3. Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from :—										
Syphilis, primary	231	108	—	—	—	—	—	—	231	108
,, secondary	112	186	—	—	—	—	—	—	112	186
,, latent in 1st year of infection*	9	38	—	—	—	—	—	—	9	38
,, all later stages ..	76	118	—	—	—	—	—	—	76	118
,, congenital	17	32	—	—	—	—	—	—	17	32
Soft Chancre	—	—	11	—	—	—	—	—	11	—
Gonorrhoea, 1st year of infection	—	—	—	—	1265	487	—	—	1265	487
,, later	—	—	—	—	1	58	—	—	1	58
Non-venereal conditions ..	—	—	—	—	—	—	1929	1982	1929	1982
Conditions remaining undiagnosed at 31st December ..	—	—	—	—	—	—	14	33	14	33
4. Number of cases dealt with for the first time during the year under report known to have received treatment for the same infection, or to have been under observation, at other Centres or Service Hospitals, or by General Practitioners approved under Ministry of Health Circular 2226	168	109	—	—	69	29	26	3	263	141
Totals of Items 1, 2, 3, and 4.	1393	1590	11	—	1721	1040	2353	2321	5478	4951
5. Number of cases discharged after completion of treatment and final tests of cure or after diagnosis as non-venereal	122	129	5	—	687	371	1807	1820	2621	2320
6(*a*). Number of cases which ceased to attend before completion of treatment and were, on first attendance, suffering from :—										
Syphilis, primary	37	53	—	—	—	—	—	—	37	53
,, secondary	54	107	—	—	—	—	—	—	54	107
,, latent in 1st year of infection*	5	18	—	—	—	—	—	—	5	18
,, all later stages ..	90	83	—	—	—	—	—	—	90	83
,, congenital	10	42	—	—	—	—	—	—	10	42
Soft Chancre	—	—	1	—	—	—	—	—	1	—
Gonorrhoea, 1st year of infection	—	—	—	—	217	183	—	—	217	183
,, later	—	—	—	—	—	44	—	—	—	44
6(*b*). Number of cases under treatment or observation which died :—										
From the disease	1	—	—	—	—	—	—	—	1	—
From treatment	—	—	—	—	—	—	—	—	—	—
From other causes	2	—	—	—	—	—	—	—	2	—
7. Number of cases which ceased to attend after completion of treatment but before final tests of cure	81	54	1	—	127	73	—	—	209	127
8. Number of cases transferred to other Centres, or to institutions, or to care of private practitioners	198	165	—	—	230	93	46	39	474	297
9. Number of cases remaining under treatment or observation on 31st December	793	939	4	—	460	276	500	462	1757	1677
Totals of Items 5, 6, 7, 8, and 9. (These totals should agree with those of Items 1, 2, 3, and 4)	1393	1590	11	—	1721	1040	2353	2321	5478	4951

Summary of Work Done at all the Centres during 1945—*continued.*

	Syphilis		Soft Chancre		Gonorrhoea		Non-venereal or undiagnosed conditions		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Totals
0. Number of cases in the following stages of syphilis included in Item 6 which failed to complete one course of treatment of either penicillin or of arsenic and bismuth :—											
Syphilis, primary	11	13	—	—	—	—	—	—	11	13	24
,, secondary	12	28	—	—	—	—	—	—	12	28	40
,, latent in 1st year of infection*	3	7	—	—	—	—	—	—	3	7	10
,, all later stages ..	15	21	—	—	—	—	—	—	15	21	36
,, congenital	1	4	—	—	—	—	—	—	1	4	5
1. Number of attendances :—											
(*a*) for individual attention of the medical officer(s) ..	18666	22560	81	—	7467	6624	4680	6186	30894	35390	66284
(*b*) for intermediate treatment, *e.g.*, irrigation, dressing ..	1339	—	17	—	10122	5963	248	121	11726	6084	17810
Total Attendances	20005	22560	98	—	17589	12587	4928	6307	42620	41474	84094
2. In-patients :—											
(*a*) Total number of persons admitted for treatment during the year	21	12	—	—	41	—	1	2	63	14	77
(*b*) Aggregate number of "in-patient days" of treatment given	297	256	—	—	200	19	4	18	501	293	794
							Other Diseases				
							M.	F.			
3. Number of cases treated with penicillin	2	3	—	—	625	126	—	—	627	129	756

	Under 1 year		1 and under 5 years		5 and under 15 year		15 years and over		Totals	
	M.	F.	M.	F.	M.	F.	M.	F.	M	F.
4. Number of cases of congenital syphilis in Item 3 above, classified according to age periods	6	6	1	1	5	5	5	20	17	32

	Microscopical		Cultural for Gonorrhoea	Serum		Cerebro-spinal fluid	Others for diagnosis of Venereal Disease
	for Syphilis	for Gonorrhoea		for Syphilis	for Gonorrhoea		
5. Pathological Work :—							
(*a*) Number of specimens examined at, and by the medical officer of, the Treatment Centre	193	9585	—	209	—	—	—
(*b*) Number of specimens from patients attending at the Treatment Centre sent for examination to an approved laboratory	510	3825	—	5649	441	—	1807

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* "Syphilis, latent in 1st year of infection," applies to cases presenting no clinical sign of syphilis but discovered (by blood test, etc.) to have contracted this disease within the preceding 12 months,

Regulation 33B.

During 1945, 380 female contacts have been notified in all. 48 were notified on two or more occasions.

One health visitor devoted her whole time, and another part of her time, to tracing and following up these cases.

Many were not investigated, as first names only were given with no addresses, making it impossible to trace.

Since the Regulation came into force in January, 1944, altogether 935 contacts have been notified. 375 cases were investigated.

The following is a summary of the result :—

(1) Not yet traced	76
(2) Not yet attending any Clinic	10
(3) Joined H.M. Forces	3
(4) Admitted to Remand Home	2
(5) Removed from Manchester—	
(*a*) referred to M.O.H. of area concerned	39
(*b*) for address unknown	21
(6) Number of cases under treatment	153
(7) Number of discharges as non-venereal or cured	69
(8) Deaths during 1945	2
	375

Of the 48 contacts notified more than once, most have been persuaded to obtain and continue treatment, 12 were persistent defaulters and Statutory Notices have been served on them.

Other Cases of Venereal Disease.

Women and girls discharged from the special ward of Crumpsall Hospital are now referred to the health visitors for following up and to ensure the continuation of treatment at the various Manchester V.D. Clinics. Since this scheme began on 22nd February, 1945, 62 cases have been referred.

The following summary shows the result of home visits :—

Attending clinics since discharged from Crumpsall	58
Failed to attend after repeated visits	3
Failed to trace	1
	62

The total number of primary and subsequent visits made by the special visitors to contacts notified under Regulation 33B and cases referred from Crumpsall Hospital during 1945 was :—

Primary visits	217
Subsequent visits	1,894

SANITARY SECTION.

BY

Isaac Priestley, F.R.San.I., F.S.I.A., Chief Sanitary Inspector.

Adulteration of Food and Drugs.

3,749 samples of food and drugs were analysed by the Public Analyst during the year ; of these, 2,353 were statutory and 1,396 informal samples, of which 3 were submitted by private individuals. When informal samples indicated adulteration statutory samples were obtained.

146 different foods and drugs were represented, most of them being staple articles of diet.

There has been a serious increase in samples found to be adulterated, the number reached 356, or 9·5 per cent. of the total samples analysed, as compared with 218, or a percentage of 6·13, in 1944. The increase was most marked in relation to milk. 1,807 milk samples were analysed and 332 reported adulterated or unsatisfactory, this being equivalent to a percentage of 18·37 as compared with 10·85 per cent. in 1944. 49 summonses were issued in connection with milk adulteration and the 14 defendants concerned were convicted in all cases. The fines and costs amounted to £270. Some of the samples revealed added water amounting to over 30 per cent.

Year	Percentage of samples adulterated or unsatisfactory	
	Milk samples	All food and drugs
1941	9·73	4·91
1942	12·69	6·65
1943	12·94	6·24
1944	10·85	6·13
1945	18·37	9·50

Composition of Milk Samples analysed in connection with the Sale of Milk Regulations, 1939.

Year	Samples	Fatty solids per cent.	Non-fatty solids per cent.	Total solids per cent.
1945	1,449	3·45	8·67	12·12
1944	1,534	3·49	8·75	12·24
1943	1,491	3·44	8·78	12·22
1942	1,528	3·48	8·74	12·22
1941	1,480	3·48	8·73	12·21
Requirements of the Sale of Milk Regulations, 1939	—	3·00	8·50	11·50

Comparison of Adulteration of Milk Samples taken on Sundays and on week-days.

When samples taken	Taken	Genuine	Adulterated	Percentage adulterated
Sundays	55	44	11	20·00
Weekdays	1,752	1,431	321	18·32

Legal proceedings were instituted in connection with adulterated samples as follows :—

Article	Nature of irregularity	No. of summons	Result of legal proceedings
Milk	Added water	47	Defendants convicted in all cases. Fines imposed totalling £203.
Milk	Added water and fat deficiency	2	Fines imposed. Total £2.
Vinegar	67 per cent. deficient in acetic acid	1	Withdrawn. Summons taken out against wholesaler, who was fined £10.
Spirits	Obstructing sampling officer by refusing to sell whisky and brandy for the purpose of analysis	1	Fined £2.

Public Health (Preservatives in Food) Regulations, 1925—1927.

All samples governed by the Regulations were examined by the Public Analyst for evidence of preservatives.

An informal samples of coffee and chicory extract was reported to bear a label which was not in accordance with the Regulations.

Public Health (Condensed Milk) Regulations, 1923—1927.
Public Health (Dried Milk) Regulations, 1923—1927.

Samples of condensed milk examined	21
Samples of dried milk examined	28

None of these samples contravened the Regulations.

Proceedings under the Provisions of the Food and Drugs Act, 1938.

Informal Samples		Article	Statutory Samples			Prosecutions				
Obtained	Adulterated		Obtained	Adulterated	Cautioned adulteration slight	Summoned	Fined	Withdrawn or dismissed	Amount of fines	Amount of costs to be paid
									£ s. d.	£ s. d.
2	—	Arrowroot	2	—	—	—	—	—	—	—
—	—	Bacon and ham	68	—	—	—	—	—	—	—
14	—	Baking powder	8	—	—	—	—	—	—	—
—	—	Barley	21	1	1	—	—	—	—	—
2	—	Borax	2	—	—	—	—	—	—	—
1	—	Borax, Glycerine of	2	—	—	—	—	—	—	—
1	—	Brawn	27	—	—	—	—	—	—	—
11	—	Bread	25	—	—	—	—	—	—	—
2	—	Butter	37	—	—	—	—	—	—	—
9	—	Cakes, Sweet	24	—	—	—	—	—	—	—
—	—	Camphor, Compound Tincture of	1	—	—	—	—	—	—	—
—	—	Camphor, Spirit of	1	—	—	—	—	—	—	—
1	—	Cascara, Extract of	5	—	—	—	—	—	—	—
11	—	Cereals, Prepared	46	—	—	—	—	—	—	—
—	—	Cheese	48	—	—	—	—	—	—	—
1	—	Cinnamon and Quinine	—	—	—	—	—	—	—	—
12	—	Cocoa	25	—	—	—	—	—	—	—
1	—	Cod Liver Oil and Malt Extract	—	—	—	—	—	—	—	—
1	—	Coffee	32	1	1	—	—	—	—	—
13	1	Coffee Extract	1	—	—	—	—	—	—	—
—	—	Cornflour	1	—	—	—	—	—	—	—
2	—	Curry Powder	—	—	—	—	—	—	—	—
4	—	Custard Powder	5	—	—	—	—	—	—	—
1	—	Cream of Tartar	—	—	—	—	—	—	—	—
—	—	Dripping	1	—	—	—	—	—	—	—
12	1	Effervescing Salts	—	—	—	—	—	—	—	—
1	—	Egg, Dried	11	—	—	—	—	—	—	—
3	—	Epsom Salts	2	—	—	—	—	—	—	—
10	—	Essences, Flavouring	2	—	—	—	—	—	—	—
—	—	Figs, Syrup of	1	—	—	—	—	—	—	—
3	*2	Fish, in glass jar	—	—	—	—	—	—	—	—
62	—	Fish, Tinned	—	—	—	—	—	—	—	—
14	—	Fish Paste, Prepared	6	—	—	—	—	—	—	—
1	—	Flour	11	—	—	—	—	—	—	—
7	—	Flour, Self-Raising	29	—	—	—	—	—	—	—
—	—	Friars Balsam	1	—	—	—	—	—	—	—
4	—	Fruit, Dried	49	1	1	—	—	—	—	—
1	—	Fullers Earth	—	—	—	—	—	—	—	—
6	—	Gelatine	9	—	—	—	—	—	—	—
2	—	Ginger, Ground	3	—	—	—	—	—	—	—
4	—	Glauber Salts	2	—	—	—	—	—	—	—
1	—	Glucose	—	—	—	—	—	—	—	—
4	—	Glycerine	4	—	—	—	—	—	—	—
16	—	Gravy Browning	—	—	—	—	—	—	—	—
—	—	Gregory Powder	1	—	—	—	—	—	—	—
1	—	Heira picra	—	—	—	—	—	—	—	—
3	—	Herbs	—	—	—	—	—	—	—	—
5	—	Honey	2	—	—	—	—	—	—	—
1	—	Hydrogen peroxide	—	—	—	—	—	—	—	—
1	—	Hypophosphates, Compound Tincture of	—	—	—	—	—	—	—	—
14	—	Ice Cream	—	—	—	—	—	—	—	—
7	1	Infants Foods	1	—	—	—	—	—	—	—
1	—	Iodine, Tincture of	1	—	—	—	—	—	—	—
9	—	Jam	35	—	—	—	—	—	—	—
3	—	Junket Powder	—	—	—	—	—	—	—	—
1	—	Lanoline	—	—	—	—	—	—	—	—
16	—	Lard	18	—	—	—	—	—	—	—
—	—	Lemon Cheese	1	—	—	—	—	—	—	—
2	—	Lemonade Crystals	—	—	—	—	—	—	—	—
—	—	Licquorice, Compound Powder of	2	—	—	—	—	—	—	—
1	—	Lime Water	—	—	—	—	—	—	—	—
5	—	Lint, Boric	—	—	—	—	—	—	—	—
1	—	Macaroni	10	—	—	—	—	—	—	—
1	—	Magnesia	—	—	—	—	—	—	—	—
1	—	Magnesia, Tri-silicate	—	—	—	—	—	—	—	—
7	—	Malt Extract	1	—	—	—	—	—	—	—
4	—	Margarine	48	—	—	—	—	—	—	—
11	—	Meat Extract	—	—	—	—	—	—	—	—
19	—	Meat Paste, Prepared	21	—	—	—	—	—	—	—
21	—	Meat, Tinned	2	—	—	—	—	—	—	—
16	—	Medicated Tablets and Lozenges	20	—	—	—	—	—	—	—
5	—	Medicinal Emulsion	—	—	—	—	—	—	—	—
8	1	Medicines, Patent	1	1	1	—	—	—	—	—
		Carried forward								

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* One case reported to Ministry of Food.

Proceedings under the Provisions of the Food and Drugs Act, 1938—continued.

Informal Samples			Statutory Samples			Prosecutions				
Obtained	Adulterated	Article	Obtained	Adulterated	Cautioned adulteration slight	Summoned	Fined	Withdrawn or dismissed	Amount of fines	Amount of costs to be paid
									£ s. d.	£ s. d.
		Brought forward								
*596	†99	Milk	1213	234	185	49	49	—	205 0 0	70 6 4
21	—	Milk, Condensed	—	—	—	—	—	—	—	—
‡23	1	Milk, Dried	6	—	—	—	—	—	—	—
—	—	Mincemeat	6	—	—	—	—	—	—	—
10	—	Mustard	7	—	—	—	—	—	—	—
1	—	Oatmeal	22	1	1	—	—	—	—	—
—	—	Oil, Camphorated	3	—	—	—	—	—	—	—
2	—	Oil, Castor	2	—	—	—	—	—	—	—
3	—	Oil, Cod Liver	5	—	—	—	—	—	—	—
—	—	Oil, Eucalyptus	3	—	—	—	—	—	—	—
—	—	Oil, Olive	2	—	—	—	—	—	—	—
5	—	Oil, Parraffin	5	—	—	—	—	—	—	—
2	—	Ointment, Anti-gas	—	—	—	—	—	—	—	—
4	—	Ointment, Boric	—	—	—	—	—	—	—	—
3	—	Ointment, Medicated	—	—	—	—	—	—	—	—
2	—	Ointment, Mercury	—	—	—	—	—	—	—	—
3	—	Ointment, Sulphur	—	—	—	—	—	—	—	—
1	—	Ointment, Wintergreen	—	—	—	—	—	—	—	—
1	—	Ointment, Zinc and Boric	—	—	—	—	—	—	—	—
1	1	Onion, Substitute Condiment	—	—	—	—	—	—	—	—
1	—	Parrish's Food	7	—	—	—	—	—	—	—
2	—	Pea Nut Butter	1	—	—	—	—	—	—	—
2	—	Peas and Beans	20	—	—	—	—	—	—	—
2	—	Pepper	2	—	—	—	—	—	—	—
15	—	Pickles	10	—	—	—	—	—	—	—
1	—	Pills	—	—	—	—	—	—	—	—
1	—	Preservative Tablets	—	—	—	—	—	—	—	—
14	1	Pudding Mixture	1	—	—	—	—	—	—	—
4	—	Puree, Blackcurrant	1	—	—	—	—	—	—	—
—	—	Rhubarb, Compound Tincture of	1	—	—	—	—	—	—	—
—	—	Rice	13	—	—	—	—	—	—	—
4	—	Rosehip, Syrup	1	—	—	—	—	—	—	—
—	—	Rye Meal	1	1	1	—	—	—	—	—
6	—	Saccharin Tablets	—	—	—	—	—	—	—	—
2	—	Salad Cream	—	—	—	—	—	—	—	—
13	—	Salt	—	—	—	—	—	—	—	—
—	—	Sal Volatile, Spirit of	1	—	—	—	—	—	—	—
40	1	Sauces	1	—	—	—	—	—	—	—
1	—	Sausages	52	—	—	—	—	—	—	—
1	—	Scone Mixture	—	—	—	—	—	—	—	—
4	—	Semolina	26	—	—	—	—	—	—	—
2	—	Senna Pods	—	—	—	—	—	—	—	—
5	—	Soda, Bi-carbonate of	2	—	—	—	—	—	—	—
1	—	Soda, Phenate of	—	—	—	—	—	—	—	—
2	—	Soup, Dried	—	—	—	—	—	—	—	—
27	—	Soup, Tinned	—	—	—	—	—	—	—	—
—	—	Soya Flour	4	—	—	—	—	—	—	—
—	—	Soyghette	2	—	—	—	—	—	—	—
6	—	Spices, Ground	4	—	—	—	—	—	—	—
—	—	Squills, Syrup of	4	—	—	—	—	—	—	—
11	1	Stuffing, Dried	1	—	—	—	—	—	—	—
6	—	Suet	2	—	—	—	—	—	—	—
8	—	Sugar	64	—	—	—	—	—	—	—
—	—	Sulphur, Flower of	2	—	—	—	—	—	—	—
1	—	Syrup, Laxative	1	—	—	—	—	—	—	—
—	—	Tartaric Acid	1	1	1	—	—	—	—	—
1	—	Tea	36	—	—	—	—	—	—	—
1	—	Thymol, Compound Glycerine of	5	—	—	—	—	—	—	—
10	—	Treacle	—	—	—	—	—	—	—	—
—	—	Tripe	10	—	—	—	—	—	—	—
50	—	Vegetables Tinned	—	—	—	—	—	—	—	—
9	1	Vinegar	44	3	2	1	—	‡1	—	—
11	—	Yeast Extract	1	—	—	—	—	—	—	—
21	1	Water, Aerated	23	1	§1	—	—	—	—	—
2	—	Water, Distilled	—	—	—	—	—	—	—	—
13	—	Beer	12	—	—	—	—	—	—	—
1	—	Cider	3	—	—	—	—	—	—	—
1	—	Cordials	18	—	—	—	—	—	—	—
2	—	Gin	5	—	—	—	—	—	—	—
2	—	Rum	4	—	—	—	—	—	—	—
6	—	Tonics	—	—	—	—	—	—	—	—
1	—	Whisky	3	—	—	—	—	—	—	—
1	—	Wines	14	—	—	—	—	—	—	—
1396	112		2353	245	195	50	49	1	205 0 0	70 6 4

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* Includes two private samples.
† Includes one private sample.
‡ Summons taken out by defendant against wholesaler, who was fined £10.
§ Referred to Ministry of Food.

Ice Cream.

During November the following report was submitted to the Public Health Committee:—

" The manufacture and sale of ice cream, which was prohibited for a period during the War, has been resumed in the past summer.

Samples have been obtained in the City which indicate that, whilst some of the ice cream being sold is of nutritional value, a considerable amount is little better than frozen water. In some instances the fat content varies from 7 to 10 per cent., whilst in other samples it is less than 0·1 per cent. Details are given in connection with twelve samples submitted to the Public Analyst recently :—

Sample numbers	Obtained from	Total solids per cent.	Fat per cent.	Starch
1773C.	Handcart in Market Street	25·0	2·1	present
1774C.	Handcart in Tib Street	20·9	2·7	present
1775C.	Kiosk	19·7	7·8	present
1312B.	Handcart in Market Street	20·2	less than 0·1	absent
1313B.	Departmental Store	16·3	0·3	absent
1314B.	Cycle in Back Piccadilly	20·9	less than 0·1	absent
1323B.	Shop	31·2	7·7	slight
1324B.	Shop	25·5	2·8	present
1325B.	Shop	23·2	1·0	present
1789C.	Basement stall	29·7	10·0	absent
1790C.	Basement stall	20·0	8·3	present
1791C.	Cart in street in Hulme	15·4	less than 0·1	present

The Public Analyst's observations on these samples were :—

> " In the absence of a legal requirement for a percentage of fat all the samples with a low fat content are from this aspect to be regarded as genuine, *i.e.*, Samples 1312B, 1313B, 1314B, 1325B, and 1791C. In my opinion these samples are very unsatisfactory because of their extremely low fat content."

It will be noted that all the samples reported as unsatisfactory by the Public Analyst contain less than 2 per cent. of fat.

Whilst the commodity sold as ice cream at present is generally far inferior to the pre-war product, quality even then was frequently unsatisfactory.

Representations were made to the Minister of Health by the Association of Municipal Corporations and the Society of Public Analysts prior to 1939 regarding standards for ice cream.

The Ice Cream Manufacturers Association of Great Britain and Ireland has recommended that ice cream should be defined as :—

> " A frozen product containing not less than 8 per cent. of Milk Fat and not less than 10 per cent. of Milk Solids."

In America standards are prescribed. Whilst the standard varies in different States it is generally from 8 per cent. to 10 per cent. fat content.

39 samples of ice cream taken in 1939 show 8 samples only which comply with the American standard.

Representations have been made to the Minister of Food by many Authorities that standards of milk fat content be prescribed. The Minister has declined to do this owing to the shortage of fats and other commodities. Whilst it may be impossible at present to prescribe a standard such as could be attained under normal conditions, some measure of protection should be afforded to the public.

Again, ice cream may be a vehicle for the spread of infection, yet no purity standards have been prescribed. Particulars of 48 samples taken in Manchester during 1945 and submitted to the Public Health Laboratory for examination showed appalling results in some cases.

Some of the more highly contaminated samples had been manufactured by the "cold mix" process, *i.e.*, adding water to powder and freezing the mixture.

Standards have been fixed in some countries with regard to purity. In Queensland the total bacterial count must not exceed 50,000 per c.c. with B.Coli. absent. In America standards vary in the different States from 100,000 to 250,000 per c.c. with B.Coli. absent.

Some manufacturers take considerable trouble to produce an article with a high standard of purity and, in some cases, safeguard their product by prepacking it in wrappers or containers, in which it is sold.

Premises used for the manufacture, storage, or sale of ice cream must be registered with the local authority, who have power to refuse registration or to remove from the register any premises which are unsuitable for the purpose. Hotels, inns, and restaurants are exempt from this requirement.

The Chief Sanitary Inspector is of opinion that Ice Cream Regulations should :—

(*a*) Fix standards of quality under the Food and Drugs Act, 1938.

(*b*) Fix purity standards.

(*c*) Insist on efficient pasteurisation during manufacture.

(*d*) Prohibit sale from street vehicles, theatres, and cinemas, unless sold prepacked in wrappers or containers.

(*e*) Remove legislative exemptions from hotels, inns, and restaurants.

The Committee passed the following resolution, which was subsequently confirmed by the City Council :—

> "That the report now submitted be approved and the Town Clerk be requested to communicate with the Association of Municipal Corporations requesting that the question of the quality and purity of ice cream should again be considered with a view to representations being made to the appropriate Ministries on the lines suggested in the report now submitted."

Artificial Cream—Section 28, Food and Drugs Act, 1938.

Registered premises at 31st December, 1945	2
Visits to registered premises	2

The Synthetic Cream (Restriction) Order, 1940, made by the Minister of Food came into force on 9th December, 1940, and prohibits the manufacture of artificial cream.

Registration of Factories and Wholesale Premises.
Section 34, Food and Drugs Act, 1938.

(*a*) Margarine factories on register	1
(*b*) Wholesale dealers in margarine on register	101
(*c*) Butter factories on register	2
Visits to registered premises	101

Food Preparation Premises.
Sections 13 and 14, Food and Drugs Act, 1938.

Registered premises at 31st December, 1945	454
Premises registered during the year	4

One or more of the following foods are prepared at the registered premises :—

Sausages, potted meat, brawn, roast and boiled ham, pressed, pickled, cooked, etc., beef and tongue, roast pork, bacon, boiled shell fish, fish pastes, pickled fish, pickled onions.

Inspections during 1945	523
Instances where minor defects or dirty conditions were remedied as a result of departmental action	23

Having regard to the limitation of supplies of building materials it has not been practicable during the war period to enforce compliance in a number of instances with all the requirements of Section 13, Food and Drugs Act, 1938, and the question of registration of the premises concerned is in abeyance for the time being.

There were no prosecutions during the year.

Bakehouses.

Inspections	1,210
Sanitary defects remedied after cautions	3
Dirty conditions remedied after cautions	23
Applications for registrations of new bakehouses	3
Applications approved, subject to the fulfilment of the requirements of the Medical Officer of Health	3
Registered	3
Removed from Register	1
On the register at 31st December, 1945	511

One bakehouse only is situated in basement premises.

In the case of the one remaining basement bakehouse a notice has been served revoking the certificate of suitability, but an extension of time has been granted to enable the occupier to secure alternative above-ground premises.

In accordance with the arrangements with the Town Planning and Buildings Department, plans of a proposed new bakehouse and alterations to six existing bakehouses were submitted to the Medical Officer of Health and were recommended for approval, subject to the fulfilment of certain requirements.

Restaurant and Cafe Kitchens.

Many of the kitchens are situated in basement rooms. Natural lighting is either very meagre or entirely absent, whilst it is practically impossible to secure adequate means of ventilation and reasonable working comfort conditions. Open windows and ventilators, at or near street level, afford ready means of access to dust and filth from the street, which must result in food contamination.

Legislation to prohibit the opening of any new basement kitchen, and for the closing of existing ones, is essential not only in the interests of the employees, but of the customers.

Restaurants and cafe kitchens recorded in the department at 31st December, 1945	295
Inspections	1,778

In connection with one restaurant kitchen where dirty and unsatisfactory conditions were reported, legal proceedings were deferred as the owners closed the restaurant pending extensive alterations and repairs which are expected to be completed during 1946. Minor defects were remedied in 25 cases.

Factory Canteens.

After specifications had been sent to the occupiers, the requirements of Section 13, Food and Drugs Act, 1938, were fulfilled at 8 canteens. Voluntary work was carried out at 14 canteens and work is in progress at 4 others.

Dirty conditions and minor defects were remedied after cautions in 39 instances.

Canteens recorded in the Department at 31st December, 1945	195
Inspections	425

Butchers' Shops and Bacon Stores.
Public Health (Meat) Regulations, 1924—1935.

Inspections	270
Instances where defects or dirty conditions were remedied after cautions	3

Sale of Food in Shops.
Section 13, Food and Drugs Act, 1938, and Milk and Dairies Order, 1926.

Inspections	366
Instances where defects or dirty conditions were remedied after cautions	7

Sale of Food on Open Sites.
Byelaws—Section 70, Manchester Corporation Act, 1934.

Open sites in the City used for the sale of food	7
Visits	20

Sale of Food from Hawkers' Barrows.
Section 66, Manchester Corporation Act, 1934.

Inspections of hawkers' barrows *re* display of name and address of vendor of food	10

Milk Control.

City Farms.

There are 45 farms in the City with milch herds, including 1 producing Tuberculin Tested milk and 9 producing Accredited milk. 197 inspections have been made by the Milk Control inspectors, particularly at milking times, and samples of milk have been examined for tubercle bacilli and cleanliness. The milk at 3 farms was found to contain tubercle bacilli. The necessary action was taken and affected animals dealt with under the Tuberculosis Order, 1938.

City Dairies, Milk Bars, and Milk Shops.

4,291 inspections of dairies, milk bars and milk shops were made and the inspection and checking of licensed pasteurising plants has been carried out at least once monthly, in addition to routine visits. 138 complaints regarding premature souring of milk, dirty bottles, and foreign bodies in bottles, etc., have been investigated and appropriate action taken.

Six contraventions of the Milk and Dairies Order (bottling of milk in the street, etc.) were reported to the Public Health Committee and legal proceedings instituted in five cases. Fines totalling £15 and costs were imposed upon the offenders.

Municipal Hospitals Milk Supply.

Pasteurised milk supplied to the Corporation hospitals has been sampled regularly at each hospital. The results of the examinations have shown that a uniform high standard of quality and cleanliness has been maintained and on no occasion was milk found to contain tubercle bacilli.

Samples of raw milk supplied to Booth Hall Hospital from Langho Colony farms and samples from the Abergele farms have been examined frequently and found satisfactory.

Raw Milk Supply.

The condition of much of the raw milk supply reaching the City continues to be bacteriologically impure. Of 135 samples examined 63, or 46·6 per cent., were unsatisfactory. In each case particulars of the analyses were forwarded to the Medical Officer of Health of the area producing the milk.

Heat Treated Milk.

A Ministry of Food scheme of allowances for the heat treatment of milk came into operation on 1st March, 1945, and in Ministry of Food Order CYQM. 7063, Local Authorities were requested to co-operate by regular sampling of heat treated milk from plants approved by the Ministry in addition to those licensed by the Local Authority.

The work has been undertaken by the Milk Control staff and the following table indicates the extent of the work done:—

	Samples taken	Satisfactory	Unsatisfactory
Phosphatase Test	347	287	60
½-hour Methylene Blue test	338	212	126
Bact. count and B. coli.	232	157	75

Monthly reports of results of examinations and tests have been forwarded to the Ministry.

Milk in Schools.

Acting upon instructions from the Public Health Committee, a survey of the Manchester schools was made to investigate conditions under which milk was delivered, stored, and served to the scholars, and the subsequent cleansing and sterilization of the utensils used. The investigation revealed a number of unsatisfactory conditions and a report was submitted to the Education Committee for their attention.

Milk Bottle Closures.

A report has been submitted to the Public Health Committee regarding the present practice of sealing milk bottles with cardboard discs sunk into the neck of the bottle. This method is unhygienic in that it renders the milk liable to contamination.

The desirability of all milk bottles being sealed by metal caps which overlap the lip of the bottle has been suggested to all milk bottlers in the City and representations have been made to the Ministry of Health with a view to the formulation of regulations under the powers conferred by Section 20 of the Food and Drugs Act, 1938, for the purpose of securing a more hygienic method of sealing milk bottles.

Table I.

Particulars of Milk Samples.

Samples examined for tubercle bacilli	Samples taken	Found to contain tubercle bacilli
Collected by Sampling Officers at :—		
(*a*) Railway Stations	—	—
(*b*) Vehicles entering the city by road	64	7
Collected by Milk Control inspectors at :—		
(*a*) Hospitals and institutions	76	—
(*b*) City dairies, milk shops, and milk bars ..	153	6
(*c*) Vehicles	404	22
(*d*) City farms	49	3
(*e*) Schools	2	—
Samples taken at Abergele Sanatorium farm	11	—
Total	759	38

Included in this figure are six samples of bulk milk from Depots.

Samples taken for Chemical Phosphatase Test, Bacterial Counts, B. coli., etc.:—

Collected at hospitals, dairies, vehicles, schools 1,816

Table II.

Analysis of Farms Tested for Tuberculin Milk.

County	Farmers represented by samples of milk	No. of farmers sending tuberculous milk	Percentage
Cheshire	291	19	6·52
Lancashire	4	1	25·00
Derbyshire	43	3	6·97
Staffordshire	11	2	18·18
Montgomeryshire	1	—	—
Total	350	25	7·14

Table III.

Tuberculous Infection in Milk, 1901—1945.

Year	Number of farmers represented by samples of milk	Number of farmers sending tuberculous milk	Percentage	Percentage of farmers from each county whose milk was proved to contain tubercle bacilli			
				Cheshire	Lancashire	Derbyshire	Staffordshire
Total for 45 years (1901—1945)	24,039	2,625	10·91				
1943	584	42	7·19	5·76	20·00	6·25	5·88
1944	655	42	6·41	6·90	14·56	7·5	1.15
1945	350	25	7·14	6·52	25·00	6·97	18·18

Table IV.

Graded and Ungraded Milk (Tuberculosis Rate).

	Tuberculin Tested	Accredited	Pasteurised	Ungraded	Total
Samples taken.. ..	50	39	177	493	759
Found to contain tubercle bacilli ..	—	3	—	35	38
Percentage	—	7·69	—	7·09	5·00

Table V.

Food and Drugs Act, 1938, and Milk and Dairies Order.

Registered farm premises and dairies	115
Registered milk shops	778
Registered premises—manufacture and sale of ice cream	169
Registered premises—storage and sale of ice cream	619
Registered persons for the sale of milk in properly sealed bottles ..	1,336
Visits to farms, dairies, milk shops, etc., by Milk Control inspectors..	4,291
Applications for registration approved	25
Applications for registration refused	—

Table VI.

Milk (Special Designations) Regulations, 1936-1941.

Licences issued during the year.

Tuberculin Tested ..	Producer	1
	Dealer	1
Accredited	Producer	9
	Dealer	2
Pasteurised..	Pasteuriser	12
	Dealer	3
Supplementary	Tuberculin tested	1
	Accredited	1
	Pasteurised	4

Housing Activities.

Houses erected by the Local Authority	165
Houses erected by private enterprise	6
Total houses erected during 1945	171

Corporation Estates.

Occupied houses (excluding tenement dwellings) on Corporation estates at 28th February, 1946	29,189
Occupied flats at 28th February, 1946	1,993
Temporary bungalows	96
Tenement dwellings at 28th February, 1946	1,091

Housing Act, 1936, *and Housing Consolidated Regulations.*

Systematic house inspection has been suspended during the period of the war.

Public Health Act, 1936, *and Local Acts.*

Primary inspections as a result of complaint or investigation of infectious disease 19,522

Defects found on inspection have been dealt with as follows:—

(*a*) Remedied as result of preliminary notice at .. .. 4,518 houses

(*b*) Statutory notices served under the Public Health Act or Local Acts with regard to .. .. 7,319 houses

Remedy effected by owners at .. .. 3,703 houses

Remedy effected by Local Authority in default at 483 houses

House inspections (including re-visits) for all purposes during 1945 .. 70,018

Remedy of urgent defects at houses scheduled to be dealt with under the Housing Act, 1936:—

Preliminary notices or intimations served on the owners with regard to .. .. 3,946 houses

Work effected at .. .. 1,790 houses

Where preliminary notices were not complied with, statutory notices were subsequently served.

Cleansing of Houses and Appurtenances.

Dirty conditions at dwelling-houses are dealt with by the issue of verbal cautions or the service of notices on the tenants. 33 houses were cleansed as a result of the former method and 16 by the latter. Three statutory notices were served, one of which was complied with.

In one instance where a house and its contents were in a particularly filthy state it was necessary to institute legal proceedings. The magistrates granted an order against the defendants and also prohibited the use of the building for human habitation until they were satisfied that it had been rendered fit. The house was vacated and cleansed.

On the certificate of the district sanitary inspector and health visitor, poor persons can obtain lime for limewashing and may borrow brushes for the purpose free of charge. 167 such certificates were issued, 217 brushes loaned, and 2,487lbs. of lime distributed.

Powers are being sought in the Manchester Corporation (General Powers) Bill now before Parliament to remedy unwholesome conditions which cannot be dealt with under present legislation.

At present the Corporation is empowered to give notice under Section 83, Public Health Act, 1936, for the cleansing, disinfecting, or whitewashing of dwelling-houses certified to be so filthy or unwholesome as to be prejudicial to health, but it fails to provide for the removal of wall papers unless the premises are verminous. The powers are also restricted to dwelling-houses although there are many work places, including offices, where conditions are such as to warrant action. Frequently it is found that the interior surface of walls and ceilings have dirty and loose paper, peeling whitewash or paint, and, in many cases, several thicknesses of paper on the walls with dirt sandwiched between each layer. This mass of loose paper, plaster, and dirt offers harbourage to vermin. The only satisfactory way of dealing with such conditions is to strip off the wall paper, make good the plaster surface, and cover such surfaces with paint, distemper, whitewash, or paper. If these powers are obtained and applied much will be done, not only to remove filthy and unwholesome conditions, but to ensure conditions under which premises can be kept clean.

The sale of verminous articles by second-hand furniture dealers and brokers has resulted in the introduction of vermin into many houses. In order to prevent such occurrences a clause has been inserted in the Manchester Corporation (General Powers) Bill to prohibit the sale or exposure for sale of any verminous article.

Houses Let-in-Lodgings.

Houses let-in-lodgings at 31st December, 1945 (including 343 houses which are farmed)	910
Inspections made with respect to compliance with the byelaws	5,152
Infringements of the byelaws remedied as a result of verbal caution	60

Good houses in respectable districts, built as single-family houses, become unoccupied partly due to the exodus of the residents to the suburbs. The rentals of these houses are too great for one family and sub-letting results. There are many such houses which fall into the hands of speculators who pack into them as many families as they will hold.

In some cases the whole house may be " farmed," each room being occupied as a combined living and sleeping room by a separate family. Some of the rooms are let unfurnished and others are furnished in a very meagre fashion. It is not customary for these houses to have caretakers living on the premises and no one has an interest in the house as a whole. The property deteriorates and there is, ultimately, degeneration in the amenities of the district.

It is for these reasons that additional powers are being sought in the Manchester Corporation (General Powers) Bill, which require that the consent of the Corporation be obtained before a house can be used as a house let-in-lodgings by an occupier who does not reside on the premises.

Common Lodging Houses.

On 31st December, 1945, the accommodation afforded at common lodging houses in the City was as follows :—

Type	Premises	Registered accommodation
Males..	16	2,225
Females	2	243
Total	18	2,468

Byelaws for Common Lodging Houses.

The byelaws relating to Common Lodging Houses in Manchester were made in 1912 and are deficient in two important features. These are :—

1. No standards are prescribed, either as regards air space or floor area, upon which to determine the number of lodgers for which a common lodging should be registered.

2. There is no power to require periodical cleansing of the walls and ceilings in such houses.

The Model Byelaws made by the Ministry of Health contain clauses dealing with these items. The adoption of the Model Byelaws mentioned was under consideration in the autumn of 1943, but the Town Clerk advised that it was not desirable to press for new byelaws at that time owing to war conditions.

The Chief Sanitary Inspector reported on these facts in December, 1945, and, as a result, the Sanitary Sub-Committee resolved that the Town Clerk, in conjunction with the Medical Officer of Health, be requested to take the necessary steps for the adoption by this City of the Model Byelaws made by the Ministry of Health under Section 240, Public Health Act, 1936, in relation to common lodging houses.

The number of inspections of common lodging houses made during the year was 293.

Dirty conditions were remedied after caution in two instances. As far as possible, satisfactory conditions have been maintained in common lodging houses having regard to the obsolete nature of the byelaws.

Caravan Dwellings.

There are 61 sites in the City occupied by 163 caravans or similar structures. During the year 135 inspections were made with a view to the prevention of nuisance and to ensure compliance with the byelaws made under Section 9 of the Housing of the Working Classes Act, 1885. This type of housing can be divided into two groups :—

(*a*) Structures occupied by travelling showmen, etc., who remain on the sites for short periods only.

(*b*) Structures used as permanent dwellings.

Section 269 of the Public Health Act, 1936, enables a local authority to grant licences authorising persons to erect or station movable buildings on sites, and they may attach appropriate conditions to the respective licences. Section 18 of the Manchester Corporation Act, 1891, contains powers somewhat similar. This section enable the Corporation to proceed against any person who erects any such structure without licence from the Corporation. Any tent remaining for less than seven days is exempted. An offender is liable to a penalty not exceeding £5 and to a daily penalty not exceeding 40/-

All the structures on the sites in question have been set up without such licences and reports have been sent to the City Architect with a view to action by the Town Planning and Buildings Committee, to which Committee the Council has delegated administrative powers.

Rent Restrictions Acts.

Applications were received from 76 tenants for certificates that the houses in their occupation were not in a reasonable state of repair. Certificates were granted in 70 cases. Action was unnecessary in 5 cases as the work involved was carried out within a short time of the receipt of the application. One house was deemed to be in a reasonable state of repair and a certificate was not granted.

In 6 cases the owners subsequently made applications for and were granted reports that the houses had been placed in a reasonable state of repair.

Canal Boats.

The number of boats on the register at 31st December, 1945, was 190, of which 181 were horse-drawn and 9 propelled by motor (oil). 5 boats were registered and 3 removed from the register during the year.

There were 1,166 inspections made of canal boats plying in approximately 11½ miles of canals within the City boundaries. Generally, they were found to be satisfactory.

The following infringements of the Canal Boats Act and Regulations were reported :—

Marking of boats	2
Dirty conditions	7
Absence of certificates	4
Insufficient ventilation	1
Boats requiring painting	2
General defects	22
Total	38

Notices were served for 33 infringements in connection with 20 boats. In regard to these, 12 notices, relating to 17 infringements, were complied with, and 8 notices, involving 16 infringements, were outstanding. In the remaining 5 instances the masters of boats were cautioned with regard to dirty conditions and on subsequent inspections the conditions were found satisfactory.

No case of infectious disease was reported.

The Regulations governing the use of canal boats as dwellings were made in 1878 under the Canal Boats Act, 1877, and these Regulations are antiquated in permitting children to live on the boats under appalling conditions. The serious overcrowding which these regulations permit may be realised from the air space prescribed, which is 60 cubic feet for an adult and 40 cubic feet for a child under 12 years.

Children under 12 years old may sleep in the same cabins as their parents or older brothers or sisters. In addition to the demoralising effect of herding together in this manner, children of school age, by constantly moving from place to place, lack educational facilities. Their playgrounds are the dirty wharves where they are subjected to danger from cranes, moving trucks, and other working operations.

The boats occupied by children are mainly the " narrow " boats which ply between Manchester and the Midlands and further south. The cabins used for living purposes are situate in the stern. These cabins average about 8ft. 6in. long, 6ft. 4in. wide, and 5ft. 4in. high, giving a gross cubic capacity of 287 cubic feet. After deduction for cupboards, lockers, and other furniture the free air space is approximately 200 cubic feet. A cabin of this size may legally be occupied by a man, his wife, and two children under 12 years old.

The canal boat regulations do not require the provision of means for natural lighting.

The usual provision for ventilation is addition to the flue pipe to the stove, is a small opening about 4in. diameter in the roof of the cabin. Sometimes small louvred ventilators are provided.

Food, personal clothing, bedding, stove, and domestic equipment are all kept in this cabin. It is the dormitory, living-room, cookhouse, wash-house, and " privy." Closet accommodation is not provided ; the occupants use a bucket and throw the contents over the side. Water storage is usually limited to a receptacle holding 3 gallons.

In some " narrow " boats there is a small fore cabin, which, according to the regulations, is registerable for habitation. These cabins are generally foul smelling and subject to penetration by water which passes over the bow of the boat.

Canal boats are totally unsuitable as dwellings for children and their use as such should be prohibited.

Section 251, Public Health Act, 1936, places a duty upon the Minister of Health to make regulations, *inter alia*, for fixing the number, age, and sex of the persons who may be permitted to dwell on canal boats, regard being had to cubic space, ventilation, provision for separation of the sexes, general healthiness and convenience of accommodation. These regulations are long overdue.

Work done by the District Sanitary Inspectors in connection with Infectious Diseases.

Infectious cases investigated		2,245
Primary visits to infected houses		2,252
Subsequent visits to infected houses		837
Inspections *re* tuberculosis		3,867
Other visits *re* tuberculosis		2,766
Visits *re* contacts :—		
Smallpox	754	
Scarlet Fever	35	
Diphtheria	24	
Other contacts	79	
Total	892	
Rooms fumigated by Inspectors		1,716
Rooms disinfected by Corporation workmen		266
Rooms disinfected by tenants		1,230

Housing Conditions—Year ended 31st December, 1945.

1. *Inspections of dwelling-houses during the year.*

(1) (*a*) Total number of dwelling-houses inspected for housing defects (Public Health Act, 1936)	19,657
(*b*) Number of inspections made for the purpose	70,018
(2) (*a*) Number of dwelling-houses (included in sub-head (1) above) which were inspected and recorded under the Housing Act, 1936, and Housing Regulations	255
(*b*) Number of inspections made for the purpose	1,024
(3) Number of dwelling-houses found to be in a state so dangerous or prejudicial to health as to be unfit for human habitation	157

2. *Remedy of defects during the year without service of formal notices.*

Number of defective dwelling-houses repaired in consequence of informal action by the local authority or their officers	4,518

3. *Action taken under statutory powers during the year.*

(*a*) Proceedings under Sections 9, 10, and 16 of the Housing Act, 1936 :—

(1) Number of dwelling-houses in respect of which notices were served requiring repairs .. .. —

(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—

(*a*) By owners .. .. —

(*b*) By local authority in default of owners .. .. —

(*b*) Proceedings under Public Health Acts :—

(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied 7,319

(2) Number of dwelling-houses in which defects were remedied after service of formal notices :—

(*a*) By owners 3,703

(*b*) By local authority in default of owners 483

(*c*) Proceedings under Sections 11 and 13 of the Housing Act, 1936 :—

(1) Number of dwelling-houses in respect of which demolition orders were made 157

(2) Number of dwelling-houses demolished in pursuance of demolition orders 105

(*d*) Proceedings under Section 12, Housing Act, 1936 :—

(1) Number of separate tenements or underground rooms in respect of which closing orders were made .. .. —

(2) Number of separate tenements or underground rooms in respect of which closing orders were determined, the tenement or room having been rendered fit .. .. —

Drainage Defects and Repairs to Yard and Passage Surfaces.

Section 23, *Public Health Act,* 1936, *Public Sewers* :—

Notices served on owners of intention to carry out works to public sewers 95

Premises served by public sewers concerned 255

Notices concerned where work was done by the local authority at the owner's expense 49

Premises involved	104
Cases where immediate action was necessary and work was carried out in emergency without notice	165
Premises involved	529

In order to deal more expeditiously with choked or seriously defective sewers powers are being sought in the General Powers Bill to empower the Medical Officer of Health or Sanitary Inspector to authorise immediate remedial action where such action is deemed to be necessary.

Public Health Act, 1936, *and Local Acts—Drains—Cleansing, reconstruction, repair,* or *provision* :—

Premises where work was effected as a result of the service of informal notices	452
Premises where work was effected as a result of the service of statutory notices	1,419
Premises where work was executed in default or at owners' requests	350
Lengths of reconstructed, repaired, etc., drain subjected to the water test by sanitary inspectors of the Department ..	313

In order to facilitate the examination and testing of drains, etc., believed to be defective, powers are being sought in the General Powers Bill to enable the Medical Officer of Health or Sanitary Inspector to exercise the powers of Section 48 of the Public Health Act, 1936, in connection with drains, private sewers, cesspools, etc.

Section 41, *Public Health Act,* 1936, *Section* 31, *Manchester Corporation (General Powers) Act,* 1930—*Repair or covering over of drains without notice to the Corporation* :—

Number of cautionary letters sent	8
Number of cautionary letters complied with	8

Section 56, *Public Health Act,* 1936, *and Local Acts—Repair of yard and passage surfaces* :—

Notices served	74
Premises concerned	76
Notices complied with	34
Premises concerned	35
Premises where work was executed in default or at owners' request	4

Water Supply.

The sources of the town's water supply are impounding reservoirs in the Lake District and Longdendale Valley on the borders of Yorkshire and Derbyshire. Practically all premises in the City are supplied with town's water. The exceptions comprise two cottages in Crumpsall, where the supplies are drawn from a spring, and a few houses in Wythenshawe, which are dependant upon supplies from wells.

During the year, 57 samples were taken for bacteriological examination, of which 52 were found to be free from coliform bacteria, 57 parallel samples taken for chemical examination proved satisfactory.

Information with regards to analyses is exchanged with the Waterworks Department on a reciprocal basis. The following information has been furnished by the Engineer and Manager of the Waterworks Department of the Corporation :—

> " The water supply has been satisfactory, both in quality and quantity. Regular samples are taken for bacteriological examination of the raw water and of treated water going into supply. Out of 389 samples of water going into supply examined in 1945, 359 were found to be free from coliform bacteria."

Typical chemical analyses of both sources of supply are :—

CHEMICAL REPORT. 13th March, 1946.

Thirlmere Supply as entering Prestwich Reservoir.

Typical Analyses	January to December, 1945.			
Date: 1945 Lab. No.	Feb. 19 924	May 28 978	Aug. 7 1009	Nov. 26 1099
pH value	6·87	7·60	7·4	7·10
Colour in 2ft. depth—				
as m.m. Hazen solution	13	14	13	14
as p.p.m. platinum	11	12	11	12
Turbidity, p.p.m. silica	1	1	1	0·5
Odour—Cold	nil	nil	nil	nil
Hot	nil	nil	faint earthy	nil
Taste—Cold	nil	nil	nil	nil
Hot	nil	nil	nil	nil
Analyses	Parts per 100,000			
	Feb. 19	May 28	Aug. 7	Nov. 26
Total solids dried at 180° Centigrade	3·28	3·40	3·60	3·92
Free acidity as CO_2	0·15	0·10	0·15	0·15
Free alkalinity as $CaCO_3$	nil	nil	nil	nil
Total alkalinity as $CaCO_3$	0·80	1·10	1·20	1·20
Total hardness as $CaCO_3$	2·1	2·00	1·90	2·40
Chlorides as Cl_2	0·85	0·85	0·80	0·90
Nitrates at N_2	0·016	0·016	0·012	0·016
Nitrites as N_2	nil	faint trace	trace	faint trace
Free and saline ammonia NH_3	0·0038	0·0012	nil	0·0040
Albuminoid ammonia NH_3	0·0038	0·0020	0·0024	0·0050
Oxygen absorbed test, 4 hours at 27° Centigrade	0·082	0·086	0·083	0·078
Silica as SiO_2	0·25	0·25	0·20	0·2
Iron as Fe	0·010	0·006	0·010	0·008
Manganese as Mn.	nil	nil	nil	nil

NOTE.—Trace of nitrites, when present, is derived from the chloramine treatment and is not due to pollution.

Chemical Report. 13th March, 1946.

Longdendale Supply as leaving Godley Reservoir.

Typical Analyses	January to December, 1945			
Date: 1945	Mar. 12	June 4	Sept. 17	Dec. 17
Laboratory No.	939	983	1027	1117
pH value	8·35	8·85	8·60	7·80
Colour in 2ft. depth—				
as m.m. Hazen solution	60	45	42	90
as p.p.m. platinum	50	38	35	75
Odour—Cold	nil	nil	nil	nil
Hot	faint earthy	nil	nil	faint earthy
Taste—Cold and Hot	nil	nil	nil	nil
Analyses	Parts per 100,000			
Total solids dried at 180° Centigrade	7·52	7·32	7·04	7·88
Free acidity as CO_2	0·05	nil	nil	0·07
Free alkalinity as $CaCO_3$	nil	0·20	0·10	nil
Total alkalinity as $CaCO_3$	1·00	1·40	1·10	1·00
Total hardness as $CaCO_3$	3·70	3·6	3·70	4·10
Chlorides as Cl_2	1·25	1·15	1·20	1·25
Nitrates as N_2	0·056	0·052	0·048	0·048
Nitrites as N_2	nil	nil	faint trace	nil
Free and saline ammonia NH_3	0·0222	0·0178	0·0214	0·0248
Albuminoid ammonia NH_3	0·0074	0·0056	0·0060	0·0094
Oxygen absorbed test, 4 hours at 27° Centigrade	0·246	0·139	0·104	0·29
Silica as SiO_2	0·80	0·80	0·80	0·90
Iron as Fe	0·035	0·048	0·047	0·070
Manganese as Mn	0·016	0·016	0·016	0·022

Note.—The high free and saline ammonia figures are largely due to added ammonia in the chloramine treatment given to the water.

"Both sources of supply are treated with hydrated lime. This has proved effective in limiting the maximum lead content in samples given overnight contact with lead pipes to about 0·25 parts per million.

It has proved impracticable to prevent access of seagulls to the larger service reservoirs. Pollution from this source is dealt with by chlorination at the outlets to the reservoirs."

Well Water.

17 wells in the Wythenshawe district provide water for 24 houses. Only two of the wells supplying two houses are considered satisfactory. The remaining 15 wells, which supply 22 houses, are so distant from the town mains as to make the provision of piped water impracticable. As a precautionary measure, pending the provision of a pure supply, tenants of the houses were advised to boil all water used for domestic purposes.

Samples of water from the spring supplying the two cottages in Crumpsall were submitted for analysis and proved satisfactory.

Sanitary Conveniences at Parks, Cemeteries, and Open Spaces.

Inspections made	396
Defects remedied as a result of departmental action	29

Public Sanitary Conveniences.

There are 145 conveniences under the control of the department with accommodation as follows :—

Males.

With urinal, watercloset, washing and parcels accommodation	8
With urinal, watercloset, and washing accommodation ..	8
With urinal and watercloset accommodation	23
With urinal accommodation	73
	112

Females.

With watercloset, washing and parcels accommodation ..	10
With watercloset and washing accommodation	12
With watercloset accommodation	11
	33

Temporary public conveniences for males and females have been erected at the corner of Princess Road and Barlow Moor Road, West Didsbury. The accommodation provided is :—

Males .. .. 2 waterclosets, urinal stalls, and 1 lavatory basin.

Females .. 3 waterclosets and one lavatory basin.

The expenditure on public conveniences during the year was £27,563 and the receipts amounted to £9,372.

Schools.

During the year 254 visits to schools were made, mainly in connection with drainage work and watercloset accommodation.

Closet Conversions.

91 pailclosets and 12 privy middens were demolished or converted to waterclosets.

There are still 584 pailclosets (288 situated in Wythenshawe) and 140 privy middens (132 in Wythenshawe) remaining in the City. These are in situations where sewers are not available, or at properties which are scheduled for action under the Housing Acts.

Waterclosets were provided at 132 premises and repairs to waterclosets and watercloset chambers were effected at 473 premises.

Sewerage and Sewage Disposal.

Main drainage work in the City is carried out by the Highways Committee, and sewage disposal is under the control of the Rivers Committee. Particulars of works constructed and arrangements made are to be found in the Annual Reports of the respective Committees.

Atmospheric Pollution.

Smoke Abatement.

Systematic observation of industrial chimneys has been maintained, but smoke abatement work has been handicapped by shortage of skilled firemen, delay in the effecting of repairs to plant and unsuitable fuel.

It was found in many instances, where smoke emissions were investigated, that inexperienced firemen were in charge of the boilers. Unsuitable fuel was responsible for much of the smoke nuisance. Many owners of industrial plants have complained that they have no choice in the selection of fuel suitable for their furnaces. In all cases where the smoke inspectors were satisfied that the nuisance was due to the fuel, representations were made to the Regional Controller of the Ministry of Fuel and Power.

In addition to the enforcement of the smoke abatement provisions of the Public Health Acts, the smoke inspectors have frequently given advice to owners of steam raising plants and to works' engineers regarding the economical use of fuel with consequent reduction in smoke. Details of their work are shown below :—

Timed observations taken	439
Revealing black smoke 2 minutes and over in half-hour periods	52
Revealing smoke other than black and causing nuisance ..	3
Revealing black smoke under 2 minutes	122
Not revealing black smoke (taken upon complaints) ..	261
Exempted chimneys revealing black smoke 2 minutes and over	1
Total amount of black smoke observed in minutes	462
Average amount of black smoke observed (in minutes) per observation revealing black smoke	2·6
Complaints received from all sources	29
Visits to works *re* smoke abatement	433
Premises where Inspector recommended plant to be altered, improved, or repaired	8
Premises where plant was found to have been repaired as a result of Inspector's recommendation	3
Cases reported to Committee	56
Cases in which no action taken (exempted chimneys)	1
Cases cautioned or excused by Committee	33
Statutory notices served	12
Magistrates order to abate nuisances obtained	6
Prosecutions for smoke nuisances and penalties imposed	4
Total amount of penalties and costs	£6 17s. 6d.
Statutory notices expiring without further action	4
Approx. number of industrial chimneys in the City	1,367

Causes to which smoke emissions were attributed.

Of the 56 cases reported to the Committee where chimneys emitted smoke for two minutes or over in the half-hour period, the nuisance was found to be due to the undermentioned causes :—

Bad firing	34
Bad firing and unsuitable fuel	6
Unsuitable fuel	12
Unsuitable fuel and defects in plant	1
Structural defects in plant	3

Manchester is co-operating with the Department of Scientific and Industrial Research in the investigation and measurement of atmospheric pollution. Seven deposit gauges and three sulphur estimation apparatuses are maintained in various parts of the City. Examination of the results for the period ended 31st March, 1946, reveals that the highest deposit recorded is at Philips Park, with a mean monthly deposit of 41·37 tons per square mile, or an annual deposit of over 496 tons per square mile.

Whilst it is pleasing to record that with one exception (Rusholme) the total solids deposited show a reduction in comparison with the previous year, these results indicate the necessity of increased effort to prevent this pollution.

Deposited Atmospheric Pollution (Tons per square mile).
April, 1945 — March, 1946.

	Rainfall (inches)		Insoluble Matter		Soluble Matter		Total Solids	
	1945–46	1944–45	1945–46	1944–45	1945–46	1944–45	1945–46	1944–45
Baguley—								
Monthly mean ..	2·4	3·0	3·39	4·21	7·36	6·99	10·75	11·20
Monthly summer ..	2·2	3·1	4·27	4·15	5·17	7·32	9·44	11·47
Monthly winter ..	2·7	2·8	2·50	4·29	9·55	6·58	12·05	10·87
Booth Hall—								
Monthly mean ..	3·1	3·6	7·68	9·67	6·56	6·70	14·24	16·37
Monthly summer ..	3·0	3·7	7·90	11·90	6·60	5·94	14·50	17·84
Monthly winter ..	3·1	2·5	7·45	7·44	6·52	7·46	13·97	14·90
Heaton Park—								
Monthly mean ..	3·2	3·7	9·83	10·49	6·69	8·01	16·52	18·50
Monthly summer ..	3·2	3·7	10·09	10·16	5·62	7·98	15·71	18·14
Monthly winter ..	3·3	3·7	9·57	10·90	7·76	8·04	17·33	18·94
Monsall—								
Monthly mean ..	2·6	3·5	14·29	17·64	9·22	10·54	23·51	28·18
Monthly summer ..	2·4	3·7	18·96	18·22	9·33	10·67	28·29	28·89
Monthly winter ..	2·9	3·4	10·40	17·06	9·13	10·42	19·53	27·48
Philips Park—								
Monthly mean ..	3·0	3·7	31·11	38·20	10·26	11·84	41·37	50·04
Monthly summer ..	2·9	3·9	33·86	45·49	8·74	11·89	42·60	57·38
Monthly winter ..	3·2	3·4	28·36	32·10	11·78	11·80	40·14	43·90
Rusholme—								
Monthly mean ..	3·1	3·4	14·96	13·35	8·08	8·42	23·04	21·77
Monthly summer ..	3·0	3·6	22·38	15·32	7·93	6·44	30·31	21·76
Monthly winter ..	3·2	3·2	8·78	11·71	8·20	10·08	16·98	21·79
Withington—								
Monthly mean ..	2·6	3·2	6·71	6·47	6·91	7·54	13·62	14·01
Monthly summer	2·4	3·3	8·76	6·43	7·09	6·76	15·85	13·19
Monthly winter ..	2·9	3·0	4·67	6·52	6·74	8·31	11·41	14·83
All Gauges—								
Monthly mean ..	2·8	3·4	12·57	14·40	7·87	8·55	20·44	22·95
Monthly summer ..	2·7	3·6	15·17	15·95	7·21	8·14	22·38	24·09
Monthly winter ..	3·0	3·3	10·24	12·87	8·52	8·95	18·76	21·82

Sulphur Pollution.

Measurements by Lead Peroxide Method.

April, 1945 to March, 1946	Weight in milligrammes SO_3 per 100 square centimetres exposed surface per day					
	Monsall		Rusholme		Withington	
	1945–46	1944–45	1945–46	1944–45	1945–46	1944–45
Monthly mean	4·22	3·66	1·90	2·31	1·91	1·80
Monthly mean (summer)	3·14	2·43	1·53	1·47	1·06	1·04
Monthly mean (winter)	5·51	4·90	2·84	3·33	2·76	2·57

Special consideration has been given by the Public Health Committee to this problem and the Committee has made recommendations for the insertion of clauses in the General Powers Bill. These are commented on below :—

1. *Prevention of smoke in certain zones or areas.*

It is necessary that a more logical and positive approach should be made to the prevention of smoke and the object of this clause is to secure by gradual means the elimination of the smoke menace. Progress in the science of fuel combustion and in the production of smokeless fuels is now reducing the necessity for the emission of smoke.

Legislation respecting smoke in this country has, up to the present, been largely concerned with the nuisance after it has been committed, but this recommendation aims at prevention. If this recommendation is implemented in future legislation the way will be paved for post-war building programme to be developed on smokeless lines.

The need for a clean atmosphere has been recognised by the Government. In the Housing Manual, 1944, issued jointly by the Ministry of Health and the Ministry of Works the importance of smoke prevention is stressed in explicit terms. In paragraph 116, pages 29 and 30, it is stated :—

> " . . . . There is now a widespread demand that the evil of atmospheric pollution shall be resolutely attacked, one of its principal causes being the inefficient combustion of raw bituminous coal in the home. The Government attach particular importance to smoke abatement in view of the injury to health and to general amenities caused by atmospheric pollution."

The possibilities of smoke prevention on a substantial and progressively increasing scale are greater today than ever.

An encouraging change has come about during the last few years which can be attributed to :—

(*a*) Technical advances, both in the field of domestic heating and industrial power.

(*b*) Recognition of the fact that our best efforts in reconstruction can soon be spoiled by smoke products.

(*c*) The continuing and increasing need for fuel economy and the better utilisation of our fuel resources, with which the conditions under which smoke is produced are incompatible.

The problem divides itself into the prevention of smoke from new sources and the elimination of existing sources. To set up a small smokeless zone, surrounded by smoke-producing areas, will give very limited benefits, but it may be regarded as a beginning. It is a nucleus which can be extended stage by stage, as conditions permit, until the whole of the City becomes a smokeless area.

In 1938 the "central area," bounded by St. Mary's Gate, Market Street, Piccadilly, Portland Street, Oxford Street, Peter Street, and Deansgate, was surveyed as to the practicability of prescribing it as a smokeless zone. It is approximately 104 acres in extent and forms part of the commercial district of the City. The result of the survey indicated that gas and electricity are used to a considerable extent for power and heating purposes and, in addition, over half the solid fuel used is smokeless. A large proportion of the heat and power used in the area is already produced by smokeless methods and it is a practicable and economical proposition that commercial concerns which continue to pollute the atmosphere should follow the example of their more enlightened neighbours.

2. *Prevention of smoke from industrial furnaces.*

The object of this clause is to prevent the installation of any industrial fuel burning plant which cannot be operated without causing smoke nuisance. Plans and specifications of all proposed fuel burning plant should be approved by the Corporation before installation. The principle involved is analogous to the submission of plans for new buildings. This does not imply prescription as to what particular plant, fuel, or method must be used. It is concerned only with the standards and suitability of the installation proposed, having regard to smokelessness and related factors, such as general efficiency and adequate capacity for requirements.

Although the idea is new to this country it has been used extensively abroad. In the majority of the principal cities in the United States smoke abatement law requires the prior approval and certification of all new fuel burning installations and extensions of, or major alterations to, existing installations. The specifications submitted should include details of the work done and heat produced by the plant, the provision for ensuring complete combustion of the fuel and the prevention of smoke.

Manchester has already adopted this measure of control over fuel burning installations in the industrial area in Wythenshawe which is being developed. Included in the agreements between the Corporation and the tenants is a stipulation that every furnace or boiler shall be approved before installation for the purpose of preventing smoke or grit being emitted from the chimney. Modern technical science has now developed to such a degree that it is practicable for industrial fuel burning plant to be installed which will function smokelessly.

3. *Control of domestic and cooking appliances with the object of preventing smoke.*

The two major sources of atmospheric pollution are industrial and domestic smoke. Opinions differ as to the relative proportion from each source, which varies according to locality. It is estimated that the domestic contribution amounts to at least 50 per cent. In Manchester, the Public Health Committee has been very keen for many years in its efforts to reduce industrial smoke, and, as a result, it is probable that domestic smoke forms a larger proportion of smoke pollution in the City.

For some years there has been considerable development in the production of smokeless fuels and research on the design of domestic grates has been intensified. There are grates now available which are capable of burning fuel smokelessly, and as research continues there will be a greater variety in production as regards design and adaptability.

Elimination of smoke at the source of production, *i.e.*, in the grate or appliance is the most practicable method of abating the domestic smoke nuisance. On a long-term policy the Corporation should have powers to prohibit the installation of grates and cooking appliances in new houses unless these appliances are capable of burning fuel smokelessly. These powers should extend also to central heating installations in flats and residential premises not embraced by the provisions of sections 101 to 106, Public Health Act, 1936. In these premises there is no reason why the type of heating plant should not be operated without producing smoke.

The acquisition of powers to prohibit the installation of domestic appliances which cannot be used without producing smoke would be a definite step towards total abolition of smoke pollution and a useful factor in future community planning generally.

In previous annual reports stress has been laid upon the necessity of applying uniform standards of control in the industrial area of South East Lancashire. Lack of such control reacts detrimentally upon the whole area with attendant health and economic disadvantages. There is no doubt that following the establishment of a joint smoke board with statutory powers a material improvement in the atmosphere of South East Lancashire could be assured.

Offensive Trades.

At the end of 1945 the following offensive trades were being carried out at 69 registered premises within the City :—

Blood manure manufacturer	1
Soap boiler	4
Tallow Melter	1
Tripe boiler	6
Fish curer	1
Oil distiller	2
Tanner	4
Fat melter	3
Gut scraper	3
Pickle and sauce manufacturer	6
Rag and bone dealer	24
Rubber paste or solution spreader	9
Size manufacturer	2
Manure Manufacturer	1
Rubber substitute manufacturer	2

Visits to premises where offensive trades are carried out	32
Observations *re* effluvium nuisances	330

Factories.

1. Inspection of mechanical and non-mechanical factories, etc., under the Factories Act, 1937, is shown in the subjoined table :—

Premises	Inspections	Written Notices	Occupiers Prosecuted
Factories (with mechanical power)	2,033	—	1
Factories (without mechanical power) ..	364	—	—
Total	2,397	—	1

2. Defects found are shown below :—

Particulars	Defects				Number of defects in respect of which prosecutions were instituted
	Found	Remedied	Referred to H.M. Inspector	Referred to City Architect	
Want of cleanliness (Section 1)	5	4	1	—	—
Overcrowding (Section 2)	—	—	—	—	—
Unreasonable temperature (Section 3)	—	—	—	—	—
Inadequate ventilation (Section 4) ..	3	*1	1	—	—
Ineffective drainage of floors (Section 6)	—	—	—	—	—
Sanitary conveniences (Section 7)—					
Insufficient	6	†7	—	—	1
Unsuitable or defective	235	‡222	—	—	—
Not separate for sexes	2	§3	—	—	—
Means of escape in case of fire	16	—	2	14	—
Totals	267	237	4	14	1

* Includes 1 from previous year.
† Includes 6 from previous year.
‡ Includes 32 from previous year.
§ Includes 1 from previous year.

Homeworkers.

The object of the inspection of premises where homework is carried on is to ensure that work is being done under sanitary conditions and at premises free from infectious disease.

259 firms in the City employ 1,489 homeworkers, of whom 1,070 reside in the City and 419 in districts of other local authorities, to which lists furnishing the necessary particulars have been sent. 26 homeworkers residing in the City are employed by firms outside.

Most homeworkers are engaged in the clothing trade, making-up frocks, overalls, children's wear, tailoring, etc. Others are engaged in making chamois leathers, quilts, soft furnishing, leather goods, electrical goods, cotton shopping bags, cushions, boots and shoes, umbrellas, drapery, and embroidery. New classes of work now being carried on are the making of plastic rubber-substitute sheets for babies' cots, plastic fancy and toilet bags, padding and covering of coat hangers, and the making of school bags.

Persons employing homeworkers are required to send to the local authority during the months of February and August in each year lists showing all the homeworkers employed during the previous six months. The homes concerned are inspected and unsatisfactory conditions sometimes found which, due to the limitation of the Act, have existed without discovery by the local authority for six months.

689 inspections of homes of homeworkers were made; the general standard of cleanliness was good. 21 instances of dirty conditions or general defects were remedied as a result of verbal caution.

During the year, 22 manufacturers were found to be employing homeworkers without keeping the prescribed forms showing the names and addresses of all persons so employed. 11 of these were established firms who had recently commenced employing homeworkers, 5 were newly established firms (including 3 refugee manufacturers), 5 others had been employing homeworkers for indefinite periods without keeping the prescribed forms whilst the remaining firm had mislaid the form. All except the last-mentioned firm pleaded ignorance of their obligations under Section 110, Factories Act, 1937. Verbal cautions were given and in all cases the necessary forms were procured and completed.

Shops Act, 1912-1936.

46 orders for exemption from compulsory closing or for "fixing the closing day" or for "fixing the closing hours" have been made by the City Council.

An application in respect of an exhibition held in the City for exemption from closing for the weekly half-holiday and substituting 10-0 p.m. for the general closing hours fixed by the Act was granted.

Shops Act, 1934, Section 10.

1,444 visits were made by shops inspectors and notices were served for the provision and maintenance of ventilation, temperature, and sanitary accommodation at 1 shop. This work was in progress at the end of the year. 36 Kata thermometer readings were taken in connection with conditions of ventilation and temperature at shops.

Dirty conditions and minor defects in shops were remedied in 9 instances after verbal cautions. Inspections of shops for all purposes numbered 1,888. At the close of the year there were 19,134 shops on the register.

Offences against the Shops Act.

Offence	Intimations sent	Intimations complied with
Failure to exhibit prescribed form *re* assistants' half holiday	11	14
Failure to exhibit notice and keep prescribed records *re* employment of young persons	10	9
Failure to exhibit prescribed form *re* seats for female Shop assistants..	10	11
Failure to exhibit prescribed form and keep prescribed records *re* Sunday trading	1	1
Totals	32	*35

* Includes some intimations sent in 1944.

Barbers' Shops and Hairdressing Establishments.

The Corporation does not possess powers to deal with certain unsatisfactory conditions found upon inspection of these premises, such as :—

Inadequate supplies of hot water.

Common use of towels, haircloths, puffs, alum sticks, blocks, and other astringents.

Inadequate cleansing and sterilization of utensils and implements, such as scissors, razors, combs, brushes, sponges, etc.

Use of headrests on barber's chairs without clean intervening covering.

Lack of personal hygiene by attendants.

Some of the more progressive establishments in the City fulfil the requisite standards, but the majority of businesses fall short of reasonable hygienic requirements. Regulations prescribing such requirements are necessary, and with this object in view, powers are being sought in the General Powers Bill.

Tips.

Tips in use by the Cleansing Department at 31st December, 1945 ..	8
Tips in use by other Corporation Departments at 31st December, 1945	9
Tips in use by private persons at 31st December, 1945	36
Total in City	53
Number of inspections of Corporation tips	113
Number of inspections of private tips	131
Total inspections	244
Number of tips at which unsatisfactory conditions were remedied ..	1

The tips in the City have been found generally innocuous, with the exception of one which has been on fire. This tip, for many years, has been the dump for refuse from one of the gas works. The refuse, which has a high carbonaceous content, became ignited to a great depth and over practically the whole area of the tip. Attempts made to extinguish the fire by covering the tip surface with large quantities of sand were ineffective. Drenching the surface of the tip heavily with water from fire hoses gave no better results. It was then decided to break into the tip with bulldozers and at the same time to drench it heavily with water pumped from an adjacent stream. These measures, which were carried out by the National Fire Service assisted by German prisoners, eventually proved effective.

Stables.

Stables in the City at 31st December, 1945	796
Accommodation provided	3,354 horses, 15 ponies
Inspections during 1945	786
Instances where minor defects were remedied on request	8
Instances where dirty conditions or the removal of manure was affected after verbal caution	1

Exhumations.

2 exhumations and re-interments took place at Southern Cemetery. The work was supervised by sanitary inspectors to ensure due care and decency and freedom from nuisance.

Rag Flock Acts, 1911—1928.

Visits to premises where rag flock is made, used, or likely to be used . .	618
Statutory samples obtained	62
Samples which conformed to the prescribed standard of cleanliness . .	61
Samples which failed to conform to the prescribed standard of cleanliness	1
Cases reported to the Committee	*1
Prosecutions instituted	2
Fines imposed	2
Amount of fines imposed	£10
Premises where rag flock is made	1

Known premises in the City where rag flock may be used in the manufacture of :—

Bedding	29
Upholstery	96
Cushions	11
Total	136

* In this case proceedings were also taken against the manufacturer of the flock.

On frequent occasions during the past twelve years these Annual Reports have stressed the need for amending legislation in connection with rag flock and other fillings used in the manufacture of bedding, upholstery, etc.

Representations on this subject have been made to the Ministry of Health as far back as 1934, resulting in the setting up of a Departmental Committee under the Chairmanship of Lord Merthyr in June, 1938. This Committee suspended its deliberations during the war years, but resumed its functions during 1945. A report has not yet appeared.* Further representations were made to the Ministry in 1945 regarding the sale of old mattresses, the fillings of which were likely to be used in the manufacture of " new " beds and pillows and also in connection with the importation of dirty old fillings from abroad, which were being offered for sale by foreign merchants to bedding manufacturers in this country, with a request that the proposed amending legislation should be sufficiently wide to bring these matters within its ambit.

As the law stands at present only rag flock which is being used for bedding, upholstery, and cushions is subject to a prescribed standard of cleanliness, but no standard exists for any other fillings, nor for rag flock if used in the manufacture of any articles other than those named above.

There is ample evidence that dirty old feathers are used in the manufacture of so called " new " pillows and bedding and of the use of dirty old fillings in the manufacture of children's toys.

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* Since this report went to press, the report of the Inter-departmental Committee on the Rag Flock Acts has made its appearance (26/7/46). The conclusions arrived at by the Inter-departmental Committee are extensive and the Committee has followed many of the recommendations submitted to it in 1938 by the Association of Municipal Corporations.

Pharmacy and Poisons Act, 1933.

(*Part II of the Poisons List.*)

Applications for entry of names as listed sellers in local authority's list	101
Applications for retention of name in local authority's list	601
Applications *re* change of address of listed seller to be recorded in local authority's list	1
Amount of fees paid	£190 13s. 6d.
Premises where selling of poisons was discontinued	24
Visits for the purpose of the Act	1,046
Cautions complied with *re* unauthorised sale of poisons or selling poisons in containers improperly labelled	49

The local authority's list now contains the following particulars of listed sellers :—

Type of Business	Sellers Listed
Grocers	364
Hardware dealers	209
Hairdressers	23
Drug Stores	46
Herbalists	7
Seedsmen	10
Horticultural and Agricultural Sundries	3
Florists	4
Miscellaneous	46
Total	712

Health Visitors and Student Sanitary Inspectors.

43 pupil health visitors were trained in the department, but this year there were no student sanitary inspectors.

Complaints and Departmental References.

Complaints and references to this section of the department	16,963

Of these 15,627 were from members of the public ; the remainder, 1,336, as shown below :—

References from	Authority, etc., concerned	References to
1,112	Other departments of the Corporation	5,474
206	H.M. Inspector of Factories	19
18	Other local authorities	86
1,336		5,579

Number of Inspections and Visits.

Primary inspections of dwelling-houses under Housing Act, 1936	—	Dwelling-houses 74,365
Subsequent inspections of dwelling-houses under Housing Act, 1936	—	
Primary inspections by Housing Inspectors—Clearance Areas	255	
Subsequent inspections by Housing Inspectors—Clearance Areas	314	
Visits *re* removal, disinfestation, etc., from Clearance Areas	28	
Visits *re* fumigation of houses in Clearance Areas	25	
Visits *re* fumigation of houses, etc., outside Clearance Areas	855	
Visits *re* demolition of property in Clearance Areas	186	
Visits *re* abatement of overcrowding, etc.	216	
Primary inspections of dwelling-houses under Public Health Act, 1936	17,270	
Subsequent inspections of dwelling-houses under Public Health Act, 1936	37,167	
Primary inspections of infected houses	2,252	
Subsequent inspections of infected houses	837	
Inspections of dwelling-houses *re* tuberculosis	3,867	
Other visits *re* tuberculosis	2,766	
Visits *re* contacts—infectious disease	892	
Houses let-in-lodgings	5,152	
Common lodging houses	293	
Tents, vans, and sheds	135	
Homes of homeworkers	689	
Canal boats	1,166	
Bakehouses	1,210	282,700
Food preparation premises	523	
Restaurant, etc., kitchens (including factory canteens)	2,203	
Butchers' shops and bacon stores	435	
Shops *re* sale of food	831	
Markets *re* sale of food	20	
Sale of food from hawkers' barrows	10	
Hotels, beerhouses, etc.	270	
Slaughterhouses, etc.	1	
Poultry killing premises	1	
Visits by sampling officers to obtain samples of food and drugs	3,746	
Visits to registered premises, Section 34, Food and Drugs Act, 1938	101	
Offensive trades	32	
Observations *re* effluvium nuisances	330	
Works boiler plant *re* smoke abatement	433	
Refuse tips—Corporation	113	
Refuse tips—Private	131	
Stables	786	
Piggeries	198	
Sanitary accommodation at schools	254	
Sanitary accommodation in parks	396	
Public sanitary conveniences	981	
Land	421	
Watercourses	37	
Streets, passages, roadways, and footpaths	1,451	
Exhumations	2	
Factories	2,397	
Shops *re* Shops Acts	1,888	
Cinemas, theatres, dance and billiard halls	126	
Churches	53	
Premises in connection with Rag Flock Acts	618	
Other business premises	2,884	
Premises for testing drains	25	
Visits *re* infirm persons	18	
Visits *re* Pharmacy and Poisons, Act 1933	1,046	
Inspections of air raid shelters	52	
Inspections of works in progress—drainage inspectors	5,499	
Visits *re* billeting of service personnel	4,874	
Visits *re* billeting of industrial workers	4,430	
Visits by temporary staff *re* housing accommodation	227,104	
Inspections of static water tanks	10	
Miscellaneous visits	16,760	
Total	357,065	

Showing Work Done after Letter or Preliminary Notice has been Issued.

Nature of Work	Letters or Preliminary Notices issued		Complied with*	
	Letters, etc.	Premises	Letters, etc.	Premises
General repairs to dwelling-houses	5,398	6,072	1,938	2,264
Urgent defects at dwelling-houses which have been ordered to be closed or which are on the list for consideration of the Committee	3,448	3,946	1,595	1,790
General repairs to premises other than to dwelling-houses	12	14	11	13
Cleansing of dirty or verminous houses	16	16	12	12
To inscribe name and address of the Medical Officer of Health, and/or landlord and/or " permitted number " in the rent book	68	72	64	66
To afford facilities for the inspection and testing of drains covered without inspection	8	8	8	8
Provision, repair, and reconstruction or cleansing of drains	738	754	434	452
Removal of offensive deposits	160	196	100	125
Discontinue keeping animals	9	9	6	9
To exhibit prescribed form *re* shop assistants' half-holiday	11	11	14	14
To exhibit notices and keep prescribed records *re* employment of young persons in shops	10	10	9	9
To exhibit prescribed form *re* seats for female shop assistants	10	10	11	11
Provision and maintenance of ventilation in shops	1	1	—	—
Provision and maintenance of temperature in shops	1	1	1	1
Provision and maintenance of sanitary conveniences in shops	2	2	—	—
Failing to exhibit prescribed form and keep prescribed records *re* Sunday Trading	1	1	1	1

* Includes some letters or preliminary notices issued in 1944. Where the work required in letters or preliminary notices has not been executed, statutory notices have since been served.

Showing Statutory Notices Served and Complied With under Public Health Housing, and Factory Acts, and the various Local Acts and Byelaws.

Work Specified	Number of Notices Served		Number of Notices complied with*	
	Notices	Premises	Notices	Premises
Repairs to dwelling-houses	3,034	3,366	1,866	2,022
Repair and maintenance of public sewers	95	255	49	104
Provision, repair, reconstruction, or cleansing of drains and other necessary appliances in connection with buildings	2,234	2,838	1,183	1,419
Provision of water-closets at dwelling-houses	146	146	132	132
Repair of water-closets and water-closet chambers at dwelling-houses	609	635	456	473
Paving, flagging, or repairing of yard surfaces	74	76	34	35
Repairing and relaying flagging of passage surfaces	2	2	2	2
Cleansing of filthy or verminous premises	3	3	1	1
Intention to enter premises for the purpose of Public Health Acts	225	246	225	246
Repairs to canal boats	20	20	14	14
Removal of offensive deposits	70	92	56	76
Discontinue keeping animals	5	5	2	2
Provision and maintenance of suitable and sufficient means of ventilation, sanitary accommodation, washing facilities, and a reasonable temperature in shops	2	1	—	—
Prevention o smoke from chimneys of premises other than dwelling-houses	12	12	4	4

* Includes some notices served in 1944.

Offences and Subsequent Action.

Offence	Persons prosecuted	Fined	Magistrates' Orders granted	Dismissed or Withdrawn	Amount of	
					Fines	Costs
					£ s. d.	£ s. d.
Neglecting to repair houses after notice	70	16	40	25	80 0 0	9 8 0
Neglecting to comply with Magistrates' Orders to repair houses	3	1	—	2	5 0 0	—
Failure to inscribe name and address of owner in rent book	2	2	—	—	1 0 0	—
Neglecting to discontinue keeping animals after notice	1	—	—	1	—	0 4 0
Neglecting to provide sanitary accommodation at non-mechanical factory ..	1	—	—	1	—	—
Selling an article of food which was not of the nature, substance, or quality demanded by the purchaser	15	14	—	1*	205 0 0	70 6 4
Obstructing a sampling officer by refusing to sell spirits for the purpose of analysis	1	1	—	—	2 0 0	—
Filling milk into bottles other than in registered premises	2	2	—	—	5 0 0	—
Neglecting to take all practicable precautions for preventing contamination of milk	2	2	—	—	5 0 0	—
Using dirty vehicles for the conveyance of milk	1	1	—	—	5 0 0	—
Neglecting to comply with notice to abate smoke nuisance	6	—	6	—	—	2 7 6
Neglecting to comply with Magistrates' Order to abate smoke nuisance ..	4	4	—	—	4 10 0	—
Selling or having possession of unclean rag flock	2	2	—	—	10 0 0	—

* Summons taken out by vendor against wholesaler, who was fined £10 and costs.

HOUSING SURVEY SECTION.

Clearance Areas and Individual Unfit Houses.

Housing Act, 1936, *Sections* 25 *and* 11.

The necessity of conserving houses which, though unfit in many respects, could still serve in the present emergency to alleviate the housing shortage has led to the retention of the Postponement of Works Order, 1939, which prevents the representation of new Clearance Areas and indicates that, for the present, the Ministry's confirmation will be withheld in respect of areas already represented. Despite this, on account of dangerous conditions 9 houses in the confirmed New Cross Clearance Area, 106 houses in areas represented and awaiting confirmation, and 23 houses in areas inspected but awaiting representation have had to be vacated, and outside these areas 113 individual unfit houses have been represented. 30 houses in the confirmed areas have been demolished during the year.

Confirmation of the Oldham Road (New Cross) Clearance Order No. 17, which was awaited at the end of 1944 has now been received. This refers to Jersey Street Dwellings, an old insanitary block of buildings which originally housed 141 families. The 4 families remaining in these dwellings at the end of 1944 have been rehoused by the Corporation and the premises are now in course of demolition.

9 families from the New Cross Clearance Area have been rehoused by the Corporation, 90 families from the individual unfit houses have been rehoused, 84 by the Corporation and 6 found their own accommodation. 35 families from St. John's proposed clearance area have found alternative accommodation for themselves.

The usual table showing the position of clearance work to date has, this year, been expanded to show the schemes held in abeyance by the Postponement Order and the Corporation commitments in respect of rehousing. The Director of Housing has continued to give high priority to cases where dangerous conditions were found, and by utilising " re-lets " in existing houses, reconditioned requisitioned properties, and some temporary housing has materially relieved the situation. Apart from 85 tenants still in the New Cross (confirmed) Area there are approximately 50 families in individual unfit houses for whom accommodation is urgently needed.

Clearance Areas, etc. Progress Report, 1933—1945.

	Number of Houses in Areas	HOUSES VACATED			HOUSES DEMOLISHED			Number of Families in Areas	FAMILIES MOVED			FAMILIES MOVED DURING 1945			
		Total to Dec., 1944	During 1945	Balance out-standing	Total to Dec., 1944	During 1945	Balance out-standing		By Corpora-ation	Own Account	Total to Dec., 1944	By Corpora-ation	Own Account	Total	Balance out-standing
Clearance areas confirmed and completed	5107	5107	—	—	5107	—	—	5738	4344	1394	5738	—	—	—	—
Clearance areas confirmed, not completed—															
Miles Platting	688	688	—	—	687	—	1	692	584	108	692	—	—	—	—
Pottery Lane	52	50	—	2	50	—	2	55	48	5	53	—	—	—	2
Collyhurst II	381	381	—	—	380	—	1	418	343	75	418	—	—	—	—
Ardwick	863	863	—	—	860	1	2	816	654	162	816	—	—	—	—
Oldham Road II	8	7	—	1	6	—	2	8	6	1	7	—	—	—	1
Broom Lane	12	12	—	—	11	—	1	3	—	3	3	—	—	—	—
New Cross	1787	1693	9	85	1609	29	149	1727	1167	463	1630	9	—	9	88
	3791	3694	9	88	3603	30	158	3719	2802	817	3619	9	—	9	91
Clearance areas represented but not confirmed—															
Bradford Road	1841	314	40	1487	314	40	1487	1954	—	330	330	—	44	44	1580
St. George's	1183	109	52	1022	109	52	1022	1184	—	100	100	—	56	56	1028
Hutchins Street	61	—	—	61	—	—	61	62	—	—	—	—	—	—	62
Harpurhey	284	—	—	284	—	—	284	299	—	—	—	—	—	—	299
Monday Street	45	5	—	40	5	—	40	70	—	11	11	—	—	—	59
Enoch Street	31	—	—	31	—	—	31	32	—	—	—	—	—	—	32
Ruth Court	11	7	—	4	7	—	4	14	—	9	9	—	—	—	5
Fog Lane	10	—	—	10	—	—	10	9	—	—	—	—	—	—	9
Oldham Road (New Cross)	939	208	14	717	70	10	859	998	21	179	200	4	19	23	775
Clarendon Road West . .	3	3	—	—	3	—	—	3	—	3	3	—	—	—	—
	4408	646	106	3656	508	102	3798	4625	21	632	653	4	119	123	3849
Clearance areas inspected, but not represented—															
St. John's	615	106	23	486	106	28	481	671	—	109	109	—	35	35	527
Individual unfit houses . .	454	290	113	51	265	75	114	375	165	66	231	84	6	90	54
Totals	14375	9843	251	4281	9589	235	4551	15128	7332	3018	10350	97	160	257	4521
		10094		4281	9824		4551				10850	257			4521
			14375			14375							15128		

During the year a preliminary survey has been made of properties in the inner areas of the City. 31,987 dwelling-houses were inspected, 27,864 of which are occupied, and the remainder (4,123) either not habitable, vacant, or used for business purposes. Of those occupied 2,891 are estimated to have a residual life of not more than three years, 21,432 will require attention within the next five years and 3,541 only appear to have a life beyond 5 years.

Abatement of Overcrowding.

Housing Act, 1936, *Section* 58, *etc.*

There were 398 houses reported as overcrowded at the end of 1944. During this year a further 66 cases have been reported. Owing to the priority given to the rehousing of tenants from dangerous properties it has only been possible to secure abatement in 33 cases, leaving 431 cases outstanding at the end of 1945.

The 33 cases relieved consist of 14 families (112 persons) who made their own arrangements and 19 families (168 persons) moved to Corporation houses. In 7 cases it was necessary to arrange for the disinfestation of furniture and effects at Monsall Disinfecting Station.

A summary of the present position is as follows :—

	Families	Adults	Children
Overcrowded houses—			
400 containing 1 family	400	2,396	665
25 ,, 2 families	50	166	55
5 ,, 3 ,, ...	15	40	10
1 ,, 5 ,, ...	5	15	1
431	470	2,617	731

These particulars are set out below in the form required by the Ministry :—

(*a*)	(i)	Dwellings overcrowded at the end of the year 1945 ..	431
	(ii)	Families dwelling therein	470
	(iii)	Persons dwelling therein	3,348
(*b*)		New cases of overcrowding reported during the year ..	66
(*c*)	(i)	Cases of overcrowding relieved during the year (1945) ..	33
	(ii)	Persons concerned in such cases	280
(*d*)		Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding	Nil

Eradication of Vermin, etc.

Public Health Act, 1936, *Sections* 83—85.

(A) *Vermin infested premises* (Public Health Act, 1936, Section 83).

731 complaints of bug infestation have been received during the year; of these 426 proved to be minor infestations for which suitable control measures were advised. The balance, 305, needed more stringent measures and all were subsequently fumigated with HCN.

In accordance with the requirements of the Ministry the following table summarises the work done. Privately-owned houses, Corporation houses, and business premises are shown separately.

Premises found to be verminous	Control measures advised	Fumigation with HCN	Other methods of treatment	
Privately-owned houses:				
Minor infestations	193	12	181	Sulphur dioxide. Chlorinated washes. Insecticidal spraying.
Serious infestations	303	143	160	
Corporation houses	209	138	48	Cimex.
			23	Other methods.
Business premises:				
Minor infestations	15	1	14	Spraying and washes
Serious infestations	11	11	—	
	731	305	426	

(B) *Furniture and Effects* (Public Health Act, 1936, Section 84).

To minimise the risk of transfer of infestation on removal from verminous premises to either Corporation or privately-owned houses, removals by the Corporation contractor are arranged. This enables the furniture and effects to be fumigated with HCN during the removal and before delivery to the new address. In cases from clearance areas, individual unfit houses, and where the abatement of overcrowding is carried out the Corporation meets the whole cost, but tenants of other verminous houses who have been allotted Corporation houses are required to pay 40s. towards the cost of removal. Other tenants of verminous houses who move to privately-owned houses and avail themselves of this facility are required to pay the whole cost of removal. The fumigation in all cases is done by the Corporation contractor at Monsall Disinfecting Station at the expense of the Local Authority in accordance with Section 84.

The removals effected during the year are set out below :—

From individual unfit houses and clearance areas to Corporation houses	91
From houses outside clearance areas to Corporation houses ..	110
From overcrowded houses to Corporation houses	7
Fumigations and removals to private houses	19
	227

The tenants are offered facilities to attend Monsall Disinfecting Station whilst their furniture is being fumigated so that they can have their personal clothing cleansed and thus eliminate every possibility of transfer of vermin to their new address. 271 adults and 213 children took advantage of this offer.

Billeting Surveys.

The City has been completely re-surveyed during the year to ascertain the accommodation available for billeting purposes. The opportunity was taken to check the total number of houses in the city, the number of rooms they contained and the amount of unused accommodation in each house.

Enquiries were made as to the number of persons away from home on National Service so as to give some measure of the probably return of population to the City.

Of the 200,523 houses in the City, 3,522 were found to be vacant and no habitable, 304 were furnished but not occupied, and 3,857 vacant.

The wish to relax war-time efforts, and increasing difficulties with rationing and the replacement of bedding, etc., have together caused a reduction in the number of people willing to billet. Despite this, accommodation for 631 persons was offered and a further 2,675 if bed and bedding were provided.

1,368 billets have been found for workers coming to the City under various schemes, and 1,950 persons have been billeted. These consist of persons transferred to the City by the Ministry of Labour, and under Governmen training schemes.

Return of Evacuees.

The evacuees from London and the South have all returned. Arrangements for this and their medical examination prior to departure were made and the return operation successfully carried out in conjunction with the child welfare centres and school health clinics.

A supplementary survey was made of houses of six rooms or more which were found in the previous survey to be under-occupied to the extent of persons. The basis of capacity was taken to be one person per room, as suggested in the Ministry's circular requesting particulars of the degree of underoccupancy prevailing.

Survey of Houses of Six Rooms or more, underoccupied by Three Persons or more, based on One Person per Room.

Persons in occupation	Number of houses with									Total
	6 rooms	7 rooms	8 rooms	9 rooms	10 rooms	11 rooms	12 rooms	13 rooms	14 rooms and above	
1	495	312	141	26	12	3	2	—	—	991
2	567	1,280	492	172	58	18	4	3	4	2,598
3	5,299	1,623	649	195	73	24	8	6	4	7,881
4	1,936	1,695	705	244	69	21	16	6	6	4,698
5	—	5	623	199	74	21	17	4	—	943
6	—	—	1	154	58	16	17	5	1	252
7	—	—	—	1	43	10	8	1	3	66
8	—	—	—	—	—	9	5	3	2	19
8+	—	—	—	—	—	—	3	1	2	6
Total..	8,297	4,915	2,611	991	387	122	80	29	22	17,454

Discussions in connection with the Ministry of Health's scheme for the temporary sharing of homes, Circular 201/45, of 16th November, 1945, resulted in the decision to use this information as the basis of a house to house canvas.

General Housing Position in the City.

Details have again been extracted from the Billeting Surveys to give an indication of the general housing position.

In comparison with the previous year the total number of houses in the City shows a reduction of 1,439, the total number of occupied houses, however, has only been diminished by 77 ; this despite voluntary demolition by owner without action by the Corporation (130) and demolitions under Section 11, Housing Act, 1936 (105), a total of 235.

There is a reduction in the number of vacant houses recorded of 1,362. Some have been reconditioned, re-let, and are now occupied houses, others have become " not habitable " and some have been demolished.

The total population recorded is 170 lower than last year, but the subdivision of families and lodgers indicates rearrangement of families within the housing accommodation. Adults and children in tenant families were reduced by 7,403 persons, whilst lodger families increased by 7,233 persons. This indicates the return of persons from the Forces and the setting up of lodger families within the existing accommodation.

The reduction in total children as compared with last year is due to the change from the former survey in which persons under 14 years of age were classed as children, whereas in this survey the Housing Act standard of 10 years was taken.

In the former survey an enquiry was made in four selected wards as to the number of persons absent from home on National Service so as to form an estimate as to the number of persons who might be expected to return to the City on the cessation of hostilities. In the present survey this enquiry has been extended to all wards to show those still absent on national or similar service. This is shown in the accompanying table under the column " absentee members of the family."

The details referred to are available in respect of each polling district and ward of the City, but are summarised in the following table :—

Summary of Details Extracted from the Billeting Survey—December, 1945.

	Manchester				Totals
	Northern Area	Eastern Area	Central Area	Southern Area	
Houses—					
Occupied	50,408	38,849	24,454	79,150	192,861
Vacant—					
Habitable	889	474	839	1,231	3,433*
Not habitable	564	122	1,940	549	3,175*
Total	51,861	39,445	27,233	80,930	199,469
With baths	30,579	14,620	4,095	68,737	118,031
Population—					
Family—					
Adults	126,554	97,383	59,069	201,556	484,562
Children	26,695	20,206	15,596	35,571	98,068
Lodgers—					
Adults	7,490	2,793	5,748	21,588	37,619
Children	1,485	698	821	3,316	6,320
Total	162,224	121,080	81,234	262,031	627,569
Absentee members of the family—					
Adults	15,954	11,716	3,462	25,046	56,178
Children	2	12	5	38	57
Density—					
Area (acres)	7,489	3,098	2,413	14,257	27,257
Houses per acre	6·92	12·73	11·28	5·68	7·32
Persons per acre	21·66	39·08	33·66	18·38	23·03
Persons per occupied house	3·22	3·12	3·32	3·31	3·25

* NOTE.—Vacant houses. Position July, 1946, when this report was going to press is as follows:—Habitable 969, not habitable 2,471

RATS AND MICE (DESTRUCTION) ACT, 1919.

Infestation Order, 1943.

General.

The Act and Order place the responsibility for the destruction of rats and mice upon the occupiers of premises. According to their provisions, the occupier must take such steps as may from time to time be necessary and reasonably practicable for the destruction of rats and mice in or on any land, and for preventing such land from becoming infested with rats or mice (land, in this connection, being taken to include any buildings or erection on land, and any cellar, sewer, drain or culvert in or under land).

The owner does not come within the scope of the Act and Order. Consequently as regards the vital operation of locating the source of infestation, difficulty is often encountered in persuading owners to undertake such necessary work as taking up the of floors of living-rooms, the surfaces of cellars, kitchens, yards, and water-closet chambers, in order to trace a suspected source and remedy any defects found. The importance of this class of work cannot be over-estimated as, once a source of infestation is discovered, the destruction of rats becomes an easier matter and a clearance can soon be effected.

In this City owners and agents do, generally speaking, co-operate with the Department, but where such co-operation is not forthcoming the difficulty of occupiers in ridding their premises of rodents is aggravated.

Complaints.

Occupiers are encouraged to report infestation of rats and mice to this Department, and when complaints are received it becomes the responsibility of the rat officers to carry out primary investigations in order to ascertain the source of infestation and advise the occupiers with regard to necessary eradication measures. In order that as nearly as possible a definite conclusion concerning the source of infestation may be reached, properties, whether dwelling-houses or business premises, are inspected on a " block " basis.

Number and Analysis of Complaints.

There has been a steady flow of complaints, such factors as derelict properties, bomb-damaged premises, and uncleared sites of bombed property, which form good harbourage for rats, having given rise to many complaints outside the areas of dilapidation.

553 complaints of the presence of rats or mice, affecting altogether 1,517 premises, were dealt with. Of these, almost one-third (500) lay in the area covered by the City centre, Hulme, Chorlton-upon-Medlock, and Moss Side. Not all of the complaints related to premises infested for the first time during 1945. Due to changing conditions, alterations in business premises, breakdowns in sewers and drains, and failure to keep proofing material in good condition, a proportion of them refer to premises at which rat infestation has previously occurred. There were 31 such " recurrence " cases, affecting 109 premises. There were, thus, 1,408 premises at which infestation occurred for the first time during 1945.

Infestation at the 1,517 premises visited may be classified as follows :—

Rat Infestation	Mice Infestation	No visible evidence of rats or mice
1,339 (88 per cent. of infestations)	149 (10 per cent. of infestations)	29 (2 per cent. of premises)

At 40·4 per cent. (541 out of 1,339) of the rat-infested premises, rats had obtained access to the interior of the premises, while at the remaining 59·6 per cent. (798 out of 1,339) infestation was confined to yards, passages, land and gardens.

Causes of Infestation.

Infestation of a building may arise from one or more of several closely related factors which, taken either singly or in conjunction, may constitute the basic cause of infestation. These must be located, and the attendant defect, be it in the structure, in the drain, or the sewer, remedied, before a clearance can be looked for. Sewers in the City form a " reservoir infestation " which gives rise to infestation of premises through breakdowns in the sewers and in the many private drainage connections to the sewers.

Defective or disused drains or sewers form the largest single cause of infestation and account for more than 60 per cent. of total infestation. In other cases, the trouble arises from defects in structures, open or culverted watercourses, the nature of business carried on, bombed sites, and the close proximity of tips and refuse dumps. From separate single causes such as these, rats, spreading in search of harbourage and food, give rise to other classes of infestation.

Nature of Business Carried on at Infested Premises.

Of some importance among the minor causes of infestation, and often reinforcing the major cause, is the nature of business carried on at infested premises, which in 1945 was directly responsible for a little over 5 per cent. of total infestations. Rats are attracted to premises where food is prepared, stored, or, sold—to cafes, restaurants, storage warehouses, and food-distributing premises, but this fact does not necessarily mean that the food premises themselves are the source of infestation ; the source may be at some other point in the block containing the attraction. Rats are often found harbouring and nesting in one part of a building, destroying fabrics for this purpose, and feeding in some other part, either where food itself is available or where food paper wrappings are negligently disposed of. Sometimes they are brought in to the premises in consignments of merchandise from other rat-infested premises.

Destruction Measures.

(A) *By Occupiers.*

In accordance with the requirements of the Act and Order previously specified, occupiers are encouraged to carry out destruction measures themselves, being suitably advised by the Rat Executive Officers according to the class of infestation prevailing. Consequently information concerning the number of rodents killed by occupiers comes to the notice of this Department infrequently, and it is, therefore, impossible to estimate the full total of rodents destroyed in the City. Occupiers can, however, be credited with the destruction of a large number of rats and mice, both in business premises and dwelling-houses.

(B) *By Destruction Companies.*

At a large number of premises within the City, rodent destruction companies, who operate on a large scale, and professional rat-catchers are employed on a contract basis. Between these companies and this Department a fair amount of co-operation exists, and so long as good results are achieved in the matter of destruction, the statutory obligations on occupiers may be regarded as being fulfilled. This department supplies such companies each year with special forms, requesting them to give information regarding the scope of their activities within the City, and the approximate number of rats and mice destroyed during the year. There is no obligation upon them to supply this information, with the result that not all the forms are returned and the total destruction resulting from privately conducted operations cannot be recorded.

One company reports having recovered the carcases of 170 rats and 365 mice, the number of poison baits laid being 65,000 and the number taken, 10,000. It will be observed that on the actual " take " of poison baits the " kill " would, in fact, be much higher than that recorded as only a small percentage of bodies can be retrieved. 700,000 baits, reported as having been laid by another company, will undoubtedly have produced effective results, but an estimate of the kill or total of recovered bodies was not supplied.

(c) *By the Public Health Department.*

Under the Infestation Order, 1943, four rodents operators are employed by the Department, following the requirements of the Ministry of Food (Infestation Branch). Destruction measures are carried out at the request of occupiers, after the building has been surveyed by the Rat Officers, and are planned in accordance with methods suggested by the Ministry, occupiers being charged for the service on a basis approved by the Corporation. Methods of treatment are varied according to the particular type of infestation prevailing.

A big number of dead rats and mice were recovered, and when this number is taken in conjunction with the size of recorded poison " takes " it may be estimated that approximately 4,050 rats and 2,300 mice were destroyed. A large potential breeding stock was thus eliminated.

(d) *By other Corporation Departments.*

Returns from other Corporation Departments (Waterworks, Rivers, Gas, etc.), which are requested to carry out destruction measures in land, buildings, and sewers under their control, provide the following information :—

Poison baits laid by Departments : 3,148

Poison baits taken by rodents : 2,245 (71 per cent.)

Total number of rodents destroyed by means other than poison :

1,051 rats, 9 mice.

These measures will have accounted for a very appreciable destruction of rodents.

City Engineer's Department.

The City Engineer's Department commenced baiting the sewer manholes in compliance with the directions of the Ministry of Food, recording the " takes " of pre-bait and poison-bait as the work proceeded. The " kill " as estimated from the poison take was as follows :—

Number of manholes baited : 6,652.

Estimated kill : 6,249 rodents.

Repressive Measures.

Repeated visits are made to premises to ensure that the occupiers are carrying out their obligations, as otherwise relaxation of their efforts might occur, infestation worsen, and consequently a longer period be required in order to clear the premises. The Rat Officers have made 3,009 such re-visits to infested premises, the weekly average for 1945 being 58 as compared with 43 for 1944.

Prevention of Reinfestation.

Proofing of premises against rodents, such as sealing of holes in brickwork, provision of new doorsteps to replace those giving access to rats, metal plating of short or worn doors, renewal or protection of cellar windows at ground level, raising of fowl-houses, renewal of broken floor space ventilators, etc., was carried out at 531 premises.

Disinfestation and Recurrence.

The efficiency of the work done over any period of years may be determined by the extent to which premises already reported clear of rodents, become reinfested and are subsequently dealt with during each year. Such a statement of efficiency has been compiled for the five-year period 1940–1944 and is given in tabular form.

Tracing of Rat Burrows in Relation to Drainage Infestation.

The execution of this class of work, which requires deep excavations in streets and public passages by the Highways Department, and in yards and cellars by owners' contractors, is an urgent problem in the City, due to the scarcity of appropriate labour and, in many cases, the period in which a clearance can be effected in premises known to be infested through defects in the drainage system is prolonged for this reason.

169 examinations of undermined surfaces were carried out by owners and occupiers of premises, by the Highways Department and by the Sanitary Section of the Public Health Department.

Percentage Efficiency at the end of 1945 of Work Done in each year in the period 1940-1944.

Particulars	Year					Totals
	1940	1941	1942	1943	1944	
Premises reported clear of rats and mice at end of each year	2,660	1,319	1,239	1,296	1,396	7,910
Premises at which reinfestation has since occurred..	87	39	18	5	8	157
Reinfested premises subsequently dealt with; again reported clear of rats and mice	32	9	5	3	—	49
Reinfested premises at which repressive measures are still in hand (1946)	55	30	13	2	8	108
Premises dealt with at which there is no further complaint of presence of rats or mice	2,605	1,289	1,226	1,294	1,388	7,802
Percentage efficiency of work done at the end of 1945	97·93	97·72	98·95	99·84	99·42	98·63

WORK OF THE SPECIAL INSPECTORS.

The following statement indicates the work done by the two Special Inspectors:—

Number of visits *re*—	
Infectious disease	71
Food poisoning	25
Food contamination	29
Water supply	4
Vermin—Infested premises	152
Institutions	63
Tips	31
Nursing homes	43
Nurses' agencies	14
Nuisances	9
Swimming baths	81
Export of washed rags	14
Public Health exhibitions	139
Public Health lectures	11
Massage or Special treatment establishments	254
Steam disinfectors	6
Civic film	15
Ministry of Health training scheme for student sanitary inspectors	14
Miscellaneous	111
Tests of water applied at swimming baths	128
Tests applied to steam disinfectors	6

Insect Pests.

The Special Inspectors continued to be called upon to advise with regard to the eradication of insect pests in domestic and business premises.

D.D.T.— Further experience has been gained in the use of D.D.T. (dichloro-diphenyl-trichloroethane) against common household insect pests and the common red-ants infesting severa lof the department's hospitals.

Ants.—Under laboratory conditions D.D.T. as a dust and as a spray has been found to be toxic to ants in relatively low concentrations (1 to 5 per cent.), death resulting within a few hours. Its application against red-ants (monomorium phaoronis) at the municipal hospitals and institutions has been mainly by spraying surfaces of the infested sections with a 3 per cent. solution of D.D.T. in paraffin, and whilst the duration of the residual toxicity of the film of D.D.T. crystals on the treated surfaces remains to be determined the results to date have shown a pronounced reduction in the degree of infestation. It is evident that the efficacy or failure of the treatment will be determined largely by the continuity and thoroughness of application of the eradicatory measures.

Bed-bugs.—In conjunction with the Housing Department a number of bug infested houses and flats have been treated with D.D.T. 3 per cent. solution in paraffin. The results have been uniformly satisfactory and further work and observations are continuing with especial attention to the residual toxicity of the treatment.

The use of thermal generation as a means of producing an insecticidal smoke incorporating either of the two most recent insecticides possessing pronounced residual toxicity has been tried in a limited series of applications. The method and results have not compared favourably with those of spraying in solution form.

House Flies.—The value of D.D.T. against the house-fly has been established and the day nurseries and child welfare centres are to be sprayed with D.D.T. solution during the coming year.

Establishments for Massage or Special Treatment.

During the year 243 visits were made to licensed establishments. The requirements of the byelaws were found to be complied with and the general standard of hygiene of premises and equipment were satisfactory.

Licensed premises on register at end of year	111
Applicants for new licences for massage and for special treatment	10
New licences for chiropody granted	6
Licences for chiropody refused	2
New licences for massage granted	0
Licences for massage refused	4

The grounds for the refusal of the licences were that the applicants did not possess such technical qualifications as could be deemed reasonably adequate. In this regard experience in practical or clinical work at hospital or recognised training school has been an important factor in determining the suitability of technical qualifications.

Steam Disinfection.

There are eight high-pressure steam disinfectors at the various municipal hospitals and the Disinfection Station in the City area, which are used for the disinfection and disinfestation of bedding and clothing. To supplement the periodical checking of the mechanical efficiency of these plants cultural tests are applied under conditions of normal usage as a routine measure. The cultures which consist of B. anthracis, B. mesentericus and B. subtilis are prepared at the Crumpsall Pathological Laboratory.

Swimming Baths.

Routine sampling of water from Corporation and privately-owned swimming baths was continued and 81 visits were made. Sixty-four samples were submitted to the Public Health Laboratory for bacteriological examinations and 128 tests for acidity-alkalinity and free residual chlorine present in the water were carried out by the Special Inspectors. The results obtained generally were satisfactory with a few exceptions to which particular attention was directed.

The objectionable features of the fill and empty system at an open-air pool in seasonal use, together with an absence of adequate safety precautions, were responsible for appropriate representations to the management concerned and the pool was closed. The overhaul of the treatment and filtration plant at an indoor pool followed a series of unsatisfactory samples and secured a satisfactory standard of treatment of the water.

Food Poisoning.

An outbreak of food poisoning occurred amongst 30 members of H.M. Forces on leave in Manchester. Of this number 26 were positive B. typhi-murium and were isolated in hospital. The symptoms throughout were those of gastro-enteritis with varying degrees of abdominal pain, vomiting and diarrhoea, headache, high temperatures, low pulse, and frequently pains in limbs. There was no fatality and after a week all were convalescing satisfactorily. The foods eaten by 27 of the 30 cases included meat pies and no other food was eaten in common. A pie and sandwich purchased and brought away by one of the infected persons from a canteen were collected from him and an examination revealed B. typhimurium. Unfortunately, the significance of infection in this pie and sandwich was reduced by the fact that they were subject to risk of infection from the man subsequent to the onset of his illness.

Although it was not possible to demonstrate conclusively the vehicle conveying the infection of B. typhi-murium, the facts available indicated meat pies from one of the pie makers as the most probable vehicle. The possibility of infection of the pies through infected mice at the place of manufacture was apparent but was not confirmed by the investigation, which included bacteriological examination of mice and mice excreta.

An investigation was conducted at a works canteen serving 1,000 meals, where it was stated that over 100 of the employees had suffered from symptoms of gastro-enteritis. It was revealed that the illnesses had been of a relatively mild nature, of short duration, and without any medical confirmation. Foods common to all who were ill were boiled ham and milk. Samples taken from the seven hams still remaining and also meat debris from the slicing machine failed on examination to show any of the food poisoning group of pathogens or any strain of a known toxin-producing type. The milk (which was stated to have soured on boiling) had either been consumed or sent away with the swill. The hygienic standard in the food storage room was unsatisfactory, there being many flies present and dust on the floors and shelves. Appropriate action was taken to remedy the unsatisfactory conditions.

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Year	Population	Death Rate			Birth Rate			Infant Death Rate			All Puerperal Causes			Puerperal and Post Abortive Sepsis			Other Puerperal Causes		
		Number of Deaths	Per 1000 Pop'n	England and Wales	Number of Births	Per 1000 Pop'n	England and Wales	Number of Deaths	Per 1000 Births	England and Wales	Number of Deaths	Rate per 1000 Births	England and Wales	Number of Deaths	Rate per 1000 Births	England and Wales	Number of Deaths	Rate per 1000 Births	England and Wales
1911	716163	12281	17·15	14·6	18595	25·96	24·4	2908	156	130	72	3·87	3·87	28	1·50	1·43	44	2·37	2·44
1912	723531	11834	16·36	13·4	18311	25·31	24·0	2251	123	94	65	3·55	3·98	22	1·20	1·39	43	2·35	2·59
1913	730982	11521	15·76	13·8	18791	25·71	24·1	2415	129	108	72	3·83	3·96	22	1·17	1·26	50	2·66	2·70
1914	731830	12473	17·04	14·0	18779	25·66	23·8	2423	129	104	79	4·21	4·17	26	1·38	1·55	53	2·82	2·62
1915	700319	12236	17·47	15·7	16696	23·84	21·8	2141	128	109	74	4·43	4·18	31	1·86	1·47	43	2·57	2·71
1916	B 742690 D 682608	11025	16·15	14·3	15597	21·00	21·9	1737	111	91	64	4·10	4·12	21	1·35	1·38	43	2·76	2·74
1917	B 735873 D 660143	10276	15·57	14·2	12937	17·58	18·1	1438	111	96	45	3·48	3·89	16	1·24	1·31	29	2·24	2·58
1918	B 746011 D 665807	12227	18·36	17·3	12926	17·33	17·6	1381	107	97	42	3·25	3·79	15	1·16	1·28	27	2·09	2·51
1919	B 771973 D 741068	10678	14·41	14·0	13686	17·73	18·5	1333	97	89	67	4·89	4·37	33	2·41	1·67	34	2·48	2·70
1920	738000	10300	13·96	12·4	19213	26·03	25·4	1882	98	79	67	3·49	4·33	45	2·34	1·81	22	1·15	2·52
1921	744000	10111	13·59	12·1	17549	23·59	22·4	1713	98	82	64	3·65	3·91	34	1·94	1·38	30	1·71	2·53
1922	748500	10653	14·23	12·8	15787	21·09	20·6	1525	97	77	59	3·74	3·81	31	1·96	1·38	28	1·77	2·43
1923	752100	10078	13·40	11·6	15388	20·46	19·7	1360	88	69	58	3·77	3·81	20	1·30	1·30	38	2·47	2·51
1924	755000	10563	13·99	12·2	14483	19·18	18·8	1454	100	75	71	4·90	3·90	31	2·14	1·39	40	2·76	2·51
1925	755800	10960	14·50	12·2	14162	18·74	18·3	1364	96	75	51	3·60	4·08	26	1·84	1·56	25	1·77	2·52
1926	752000	10077	13·40	11·6	13969	18·58	17·8	1216	87	70	68	4·87	4·12	30	2·15	1·60	38	2·72	2·52
1927	751900	10532	14·01	12·3	13036	17·34	16·7	1122	86	69	65	4·99	4·11	27	2·07	1·57	38	2·92	2·54
1928	755900	9989	13·21	11·7	12902	17·07	16·7	1179	91	65	59	4·57	4·42	27	2·09	1·79	32	2·48	2·63
1929	746500	11839	15·86	13·4	13058	17·49	16·3	1272	97	74	61	4·67	4·33	24	1·84	1·80	37	2·83	2·53
1930	757900	9791	12·92	11·4	12851	16·96	16·3	995	77	60	64	4·74	3·40	34	2·52	1·92	30	2·22	2·48
1931	772090	10645	13·79	12·3	12337	15·98	15·8	1049	85	66	40	†3·09	†3·94	18	†1·39	†1·59	22	†1·70	†2·35
1932	763000	10076	13·21	12·0	11825	15·50	15·3	1015	86	65	47	3·79	4·04	20	1·61	1·55	27	2·18	2·49
1933	758150	10345	13·65	12·3	11156	14·71	14·4	834	75	64	52	4·43	4·32	20	1·70	1·75	32	2·73	2·57
1934	754600	9530	12·63	11·8	11555	15·31	14·8	798	69	59	48	3·97	4·42	16	1·32	1·95	32	2·65	2·47
1935	748100	10120	13·53	11·7	11379	15·21	14·7	809	71	57	44	3·69	3·93	23	1·93	1·61	21	1·76	2·32
1936	744000	10207	13·72	12·1	11231	15·10	14·8	863	77	59	52	4·42	3·65	16	1·36	1·34	36	3·06	2·31
1937	736500	10216	13·87	12·4	10786	14·64	14·9	823	76	58	46	4·09	3·13	13	1·16	·94	33	2·93	2·19
1938	732900	9243	12·61	11·6	11025	15·04	15·1	761	69	53	46	3·98	2·97	17	1·47	·86	29	2·51	2·11
1939	B 727600 D 702500	9405	13·39	12·1	10378	14·26	15·0	634	61	50	31	2·85	2·82	8	·73	·74	23	2·12	2·08
1940	622300	11191	17·98	14·3	10388	16·69	14·6	729	70	55	24	2·21	2·16*	9	·83	·52*	15	1·38	1·64*
1941	601840	10016	16·64	12·9	9849	16·36	14·2	832	84	59	26	2·53	2·23*	10	·97	·48*	16	1·56	1·75*
1942	601900	8861	14·72	11·6	10276	17·07	15·8	663	65	49	25	2·33	2·01*	7	·65	·42*	18	1·68	1·59*
1943	599300	9290	15·50	12·1	11185	18·66	16·5	681	61	49	27	2·33	2·29	12	1·04	·73	15	1·29	1·56
1944	614760	8731	14·20	11·6	12204	19·85	17·6	654	54	46	23	1·83	1·93	8	·64	·59	15	1·19	1·34
1945	623480	8985	14·41	11·1	11362	18·22	16·1	634	56	46	12	1·02	1·79	3	·25	·49		·77	1·30

Year	All Forms of Tuberculosis			Pulmonary Tuberculosis			Other Forms of Tuberculosis			Smallpox			Typhoid and Paratyphoid Fevers			Scarlet Fever		
	Notified	Deaths	Rate per 1000 Pop'n	Notified	Deaths	Rate per 1000 Pop'n	Notified	Deaths	Rate per 1000 Pop'n	Notified	Deaths	Rate per 1000 Pop'n	Notified	Deaths	Rate per 1000 Pop'n	Notified	Deaths	Rate per 1000 Pop'n
1911	—	1491	2·08	1837	1143	1·60	—	348	·49	—	—	—	256	50	·07	1930	44	·06
1912	—	1524	2·11	2404	1150	1·59	—	374	·52	1	1	·001	242	46	·06	1840	50	·07
1913	3885	1409	1·93	2412	1002	1·48	1473	327	·45	1	—	—	292	48	·07	3715	93	·13
1914	3596	1639	2·24	2664	1293	1·77	932	346	·47	—	—	—	156	40	·05	4712	161	·22
1915	3050	1639	2·34	2213	1342	1·92	837	297	·42	—	—	—	174	37	·05	2022	82	·12
1916	3434	1587	2·32	2549	1258	1·84	885	329	·48	—	—	—	78	23	·03	1185	33	·05
1917	3129	1569	2·38	2247	1228	1·86	882	341	·52	—	—	—	86	10	·02	829	15	·02
1918	2544	1471	2·21	1846	1196	1·89	698	275	·41	—	—	—	68	9	·01	779	21	·03
1919	2025	1206	1·63	1591	986	1·33	434	220	·30	14	1	·001	90	19	·03	1758	26	·04
1920	2044	1101	1·49	1507	899	1·22	537	202	·27	4	—	—	54	11	·01	3829	46	·06
1921	2174	1230	1·65	1644	981	1·32	530	249	·33	—	—	—	90	12	·02	5419	59	·08
1922	2081	1199	1·60	1486	954	1·27	595	245	·33	4	—	—	38	5	·007	3682	61	·08
1923	2228	1154	1·53	1496	936	1·24	732	218	·29	—	—	—	50	9	·01	1811	31	·04
1924	2200	1137	1·51	1568	910	1·21	632	227	·30	—	—	—	106	13	·02	1799	34	·05
1925	2134	1193	1·58	1511	1005	1·33	623	187	·25	—	—	—	69	10	·01	2872	59	·08
1926	1810	1082	1·44	1352	911	1·21	458	171	·23	2	—	—	33	10	·01	2282	25	·03
1927	1889	1060	1·41	1388	894	1·19	501	166	·22	36	—	—	24	3	·004	1937	20	·03
1928	1895	998	1·32	1409	852	1·13	486	146	·19	68	—	—	37	4	·005	2168	13	·02
1929	1751	1078	1·44	1373	931	1·25	378	147	·20	8	1	·001	49	6	·008	2375	9	·01
1930	1735	1061	1·40	1275	898	1·18	460	163	·22	2	—	—	42	8	·01	3771	10	·01
1931	1781	994	1·29	1285	861	1·12	496	133	·17	—	—	—	27	4	·005	2973	11	·01
1932	1489	885	1·16	1087	766	1·00	402	119	·16	—	—	—	47	3	·004	2319	17	·02
1933	1394	891	1·18	1081	791	1·04	313	100	·13	—	—	—	15	2	·003	1804	14	·02
1934	1386	881	1·17	1073	761	1·01	313	120	·16	—	—	—	16	2	·003	2151	14	·02
1935	1313	808	1·08	1006	714	·95	307	94	·13	—	—	—	25	4	·005	2849	13	·02
1936	1276	776	1·04	975	671	·90	301	105	·14	—	—	—	19	2	·003	2463	6	·008
1937	1431	789	1·07	1055	674	·92	376	115	·16	—	—	—	13	1	·001	2656	7	·01
1938	1250	726	·99	947	627	·86	303	99	·14	—	—	—	7	—	—	2487	8	·01
1939	1199	701	1·00	910	601	·86	289	100	·14	—	—	—	30	1	·001	1332	1	·001
1940	1272	769	1·24	1012	678	1·09	260	91	·15	—	—	—	72	1	·002	768	1	·002
1941	1309	794	1·32	1036	679	1·13	273	115	·19				69	—	—	885	2	·003
1942	1201	672	1·12	946	592	·99	255	80	·13	—	—	—	11	2	·003	1869	1	·002
1943	1249	639	1·07	957	546	·91	292	93	·16	—	—	—	20	1	·002	1992	1	·002
1944	1157	559	·91	922	491	·80	235	68	·11				4	—	—	1539	—	—
1945	1206	577	·93	982	496	·80	224	81	·13	—	—	—	9	1	·001	1110	—	—

Year	Diphtheria			Measles			Whooping Cough			Bronchitis		Pneumonia All Forms			Influenza		Diarrhœa (Under 2 Years)		Appendicitis	
	Notified	Deaths	Rate per 1000 Pop'n	Notified	Deaths	Rate per 1000 Pop'n	Notified	Deaths	Rate per 1000 Pop'n	Deaths	Rate per 1000 Pop'n	Notified	Deaths	Rate per 1000 Pop'n	Deaths	Rate per 1000 Pop'n	Deaths	Rate per 1000 Pop'n	Deaths	Rate per 1000 Pop'n
1911	472	89	·12	—	337	·47		141	·20	1071	1·50		1278	1·78	87	·12	1100	1·54	63	·09
1912	474	96	·13		495	·68		300	·41	1259	1·74		1447	2·00	109	·15	272	·38	39	·05
1913	650	99	·14	—	264	·36		137	·19	1145	1·57	—	1173	1·60	132	·18	622	·85	49	·07
1914	746	103	·14	—	300	·41	—	285	·39	1206	1·65	—	1321	1·81	118	·16	523	·71	53	·07
1915	548	103	·15		453	·65		70	·10	1305	1·86	—	1141	1·63	142	·20	479	·68	58	·08
1916	614	64	·09	9230	184	·27	—	304	·45	1232	1·80	—	991	1·45	140	·21	305	·45	57	·08
1917	581	57	·09	10613	293	·44	—	53	·08	1132	1·71	—	984	1·49	105	·16	282	·43	48	·07
1918	518	55	·08	8448	167	·25	5738	332	·50	1040	1·56	—	1500	2·25	2042	3·07	139	·21	33	·05
1919	471	35	·05	8420	106	·14	1000	39	·05	1246	1·68	1226	1027	1·39	1088	1·47	162	·22	38	·05
1920	914	71	·10	10635	210	·28	2290	86	·12	1177	1·59	825	1019	1·38	228	·31	237	·32	53	·07
1921	1045	90	·12	1135	4	·005	4415	170	·23	1038	1·40	1796	995	1·31	204	·27	375	·50	52	·07
1922	839	79	·11	19614	358	·48	2160	99	·13	1233	1·65	2755	1149	1·51	387	·52	190	·25	49	·07
1923	549	47	·06	3481	84	·11	3804	186	·25	1061	1·41	2493	1097	1·46	279	·37	209	·28	53	·07
1924	574	61	·08	18349	373	·49	1706	112	·15	1153	1·53	2650	1106	1·46	334	·44	186	·25	45	·06
1925	1037	99	·13	7941	128	·17	3333	211	·28	1279	1·69	2551	1060	1·40	259	·34	213	·28	49	·06
1926	1153	102	·14	10953	162	·22	2094	63	·08	996	1·32	2189	873	1·16	213	·28	255	·34	47	·06
1927	1318	91	·12	13987	164	·22	2244	125	·17	1041	1·38	2950	1053	1·40	450	·60	181	·24	50	·07
1928	1196	94	·12	7141	127	·17	3189	93	·12	793	1·05	2539	928	1·23	177	·23	246	·33	56	·07
1929	895	56	·08	9512	68	·09	4037	222	·30	1002	1·34	3140	1300	1·74	697	·93	240	·32	64	·09
1930	1059	57	·07	10738	147	·19	1388	36	·05	647	·85	2349	827	1·09	128	·17	166	·22	49	·06
1931	735	60	·08	7771	63	·08	3150	90	·12	826	1·07	2485	981	1·27	337	·44	172	·22	49	·06
1932	1069	81	·11	12238	129	·17	2280	84	·11	556	·73	2368	882	1·16	184	·24	125	·16	42	·06
1933	1019	87	·11	6350	48	·06	2230	49	·06	579	·76	2527	824	1·09	532	·70	102	·13	45	·06
1934	1276	83	·11	11383	96	·13	1565	37	·05	422	·56	1674	687	·91	92	·12	113	·15	42	·06
1935	1302	60	·08	9907	99	·13	1632	50	·07	485	·65	2480	765	1·02	222	·30	74	·10	53	·07
1936	1649	91	·12	8807	114	·15	1457	52	·07	534	·72	2213	781	1·05	125	·17	57	·08	40	·05
1937	1883	89	·12	6550	44	·06	1403	54	·07	475	·64	2427	742	1·01	308	·42	64	·09	60	·08
1938	1591	55	·08	9949	60	·08	1075	13	·02	347	·47	1646	589	·80	84	·11	75	·10	38	·05
1939	1031	36	·05	574	—	—	1406	30	·04	427	·61	1324	411	·59	160	·23	62	·09	42	·06
1940	917	17	·03	14844	28	·04	670	7	·01	1733	2·78	1785	551	·89	198	·32	75	·12	42	·07
1941	1009	46	·08	3869	20	·03	4715	65	·11	1034	1·72	1809	548	·91	105	·17	113	·19	[illegible]	·04
1942	814	27	·05	10468	17	·03	1103	16	·03	823	1·37	1402	364	·60	51	·09	93	·15	25	·04
1943	791	30	·05	4419	12	·02	3277	42	·07	971	1·62	1374	468	·78	231	·38	88	·15	24	·04
1944	266	6	·01	6736	9	·01	2003	26	·04	791	1·29	979	357	·58	50	·08	73	·12	24	·04
1945	302	14	·02	5596	8	·01	1835	25	·04	984	1·58	857	365	·59	44	·07	85	·14	27	·04

Year	Cancer		Heart Disease		Nephritis		Congenital Malformations and Debility, etc., including Premature Birth		Violence (Apart from Suicide)		Suicide		Year
	Deaths	Rate per 1000 Pop'n	Deaths	Rate per 1000 Pop'n	Deaths	Rate per 1000 Pop'n	Deaths	Rate per 1000 Pop'n	Deaths	Rate per 1000 Pop'n	Deaths	Rate per 1000 Pop'n	
1911	772	1·08	813	1·14	[illegible]	·48	798	1·11	339	·56	66	·09	1911
1912	741	1·02	853	1·18	[illegible]	·42	742	1·03	383	·53	71	·10	1912
1913	725	·99	842	1·15	296	·40	741	1·01	425	·58	66	·09	1913
1914	751	1·03	912	1·25	359	·49	734	1·00	457	·62	66	·09	1914
1915	784	1·12	1020	1·46	359	·51	668	·95	399	·57	44	·06	1915
1916	805	1·18	872	1·28	331	·48	[illegible]	·77	424	·62	26	·04	1916
1917	786	1·19	820	1·24	304	·46	478	·72	390	·59	33	·05	1917
1918	823	1·24	773	1·16	271	·41	470	·71	295	·44	37	·06	1918
1919	868	1·17	869	1·17	262	·35	504	·68	299	·40	51	·07	1919
1920	948	1·28	902	1·22	270	·37	689	·93	305	·41	43	·06	1920
1921	953	1·28	1002	1·35	258	·35	581	·78	282	·38	63	·08	1921
1922	964	1·29	1006	1·31	282	·38	513	·69	272	·36	76	·10	1922
1923	1058	1·41	1022	1·36	250	·33	440	·59	252	·34	70	·09	1923
1924	1057	1·40	1066	1·41	[illegible]	·34	511	·68	257	·34	55	·07	1924
1925	1060	[illegible]	1140	1·51	244	·32	484	·64	288	·38	87	·12	1925
1926	1122	1·49	1102	1·47	[illegible]	·32	446	·59	268	·36	64	·09	1926
1927	1089	1·45	1201	1·60	242	[illegible]	414	·55	250	·33	94	·13	1927
1928	1130	1·50	1268	1·68	303	[illegible]	418	[illegible]	274	·36	90	·12	1928
1929	1168	1·56	1697	2·27	279	·37	444	·59	312	·42	81	·11	1929
1930	1149	1·52	1523	2·01	295	·39	475	[illegible]	317	·42	[illegible]	·14	1930
1931	1250	1·62	1738	2·25	300	·39	442	·57	302	·39	[illegible]	·12	1931
1932	1287	1·69	1761	2·31	292	[illegible]	439	·58	323	·43	116	·15	1932
1933	1194	1·57	2090	2·76	[illegible]	·35	409	·54	335	·44	[illegible]	·13	1933
1934	1273	1·69	1905	2·52	[illegible]	·37	417	·55	[illegible]	·40	96	·13	1934
1935	1338	1·79	1979	2·65	258	·34	[illegible]	·59	286	·38	99	·13	1935
1936	1256	1·69	2224	2·99	270	·36	444	·60	318	[illegible]	[illegible]	[illegible]	1936
1937	1281	1·74	2315	3·14	261	·35	419	·57	307	·42	70	·10	1937
1938	1316	1·80	2083	2·84	230	·31	386	·53	295	·40	88	·12	1938
1939	1265	1·80	2311	3·29	258	·37	357	·51	376	[illegible]	91	[illegible]	1939
1940	1242	2·00	2023	[illegible]	274	·44	350	·56	692	1·11	71	·11	1940
1941	1259	2·09	1883	3·13	235	·39	372	·62	[illegible]	[illegible]	57	·09	1941
1942	1256	2·09	1938	[illegible]	233	·39	379	·63	297	·49	50	·08	1942
1943	1280	2·14	1833	3·06	222	[illegible]	356	·59	292	·49	60	·10	1943
1944	1286	2·09	1950	3·17	226	[illegible]	367	·60	280	·46	[illegible]	·11	1944
1945	1297	2·08	1824	[illegible]	211	·34	332	·53	233	[illegible]	74	·12	1945

B Population for calculating Birth rates.
D Population for calculating Death rates.

* Excluding Abortion.
† From 1931 Rates for Maternal Mortality are based on Live and Still Births.